STIC Search Report
EIC 2100

TO: Thu Ha Nguyen Location: Art Unit : 2155 Tuesday, June 03, 2003 Case Serial Number: 09/502377	From: Terese Esterheld Location: EIC 2100 PK2-4B30 Phone: 308-7795 Terese.esterheld@uspto.gov

Search Notes

Dear Examiner Nguyen,

Attached, please find the results of your search request for application 09/502377. I have concentrated on finding information on Clients request the capture of a program, encoded, transmitted at a different time.

I have marked articles of possible interest. Please look over the complete packet as articles that have not been marked may be of value to you.

Thank you for coming to EIC 2100.

Terese Esterheld

tiscali.reference

Check your mail   **Search** [   ]   (Search) The

.home .information .reference .dictionaries .computers

INDEX: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

REFERENCE

DICTIONARIES

Animals

Computers

Difficult Words

English

Plants

COMPUTERS

protocol

An agreed set of **standards** for the transfer of data between different devices. They cover transmission speed, format of data, and the signals required to synchronize the transfer. See also interface.

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Word or phrase: | protocol | | Search |

◉ Find definitions   ○ Find translations   ○ Search all dictionaries

Jump to: General, Art, Business, Computing, Medicine, Miscellaneous, Religion, Science, Slang, Sports, Tech, Phrases

We found 76 dictionaries with English definitions that include the word *protocol*:
Tip: Click on the first link on a line below to go directly to a page where "protocol" is defined.

➡ **General** (21 matching dictionaries)

1. protocol : Merriam-Webster's Online Dictionary, 10th Edition [home, info]
2. protocol : Encarta® World English Dictionary, North American Edition [home, info]
3. protocol : Cambridge International Dictionary of English [home, info]
4. protocol : The Wordsmyth English Dictionary-Thesaurus [home, info]
5. protocol : The American Heritage® Dictionary of the English Language [home, info]
6. protocol : Infoplease Dictionary [home, info]
7. protocol : Dictionary.com [home, info]
8. protocol : UltraLingua English Dictionary [home, info]
9. protocol : Cambridge Dictionary of American English [home, info]
10. Protocol (object-oriented programming), Protocol : Wikipedia, the Free Encyclopedia [home, info]
11. Protocol : Online Plain Text English Dictionary [home, info]
12. protocol : Webster's Revised Unabridged, 1913 Edition [home, info]
13. protocol : Rhymezone [home, info]
14. protocol, protocol (het) : AllWords.com Multi-Lingual Dictionary [home, info]
15. protocol : Webster's 1828 Dictionary [home, info]
16. protocol : Columbia Encyclopedia, Six Edition [home, info]
17. protocol : Hutchinson's Dictionary of Difficult Words [home, info]
18. PROTOCOL : 1911 edition of the Encyclopedia Britannica [home, info]
19. protocol : WordNet 1.7 Vocabulary Helper [home, info]

Quick definitions
(*Protocol*)

- **noun**: code of correct conduct (Example: *"Safety protocols"*)
- **noun**: forms of ceremony and etiquette observed by diplomats and heads of state
- **noun**: (computer science) rules determining the format and transmission of data

Encyclopedia article

A **protocol** is a rule which guides how an activity should be performed. Formerly used mainly in the diplomatic and government fields of endeavor to denote unwritten guidlines, by the turn of the twenty first century it had come into wide use in the computer and

20. <u>protocol</u> : LookWAYup Translating Dictionary/Thesaurus [<u>home</u>, <u>info</u>]
21. <u>protocol</u> : Encyclopedia.com [<u>home</u>, <u>info</u>]

<div align="right">
communications fields.
(<u>continued</u> at Wikipedia)

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feature.
</div>

�Art (4 matching dictionaries)

22. <u>Protocol</u> : English-Chinese Dictionary of Graphic Communications (Big 5) [<u>home</u>, <u>info</u>]
23. PROTOCOL : Technical Glossary of Theatre Terms [<u>home</u>, <u>info</u>]
24. <u>protocol</u> : The Organon: A Conceptually Indexed Dictionary (by Genus and Differentia) [<u>home</u>, <u>info</u>]
25. <u>protocol</u> : ODLIS: Online Dictionary of Library and Information Science [<u>home</u>, <u>info</u>]

➤ <u>Business</u> (6 matching dictionaries)

26. <u>Protocol</u> : MoneyGlossary.com [<u>home</u>, <u>info</u>]
27. <u>protocol</u> : International Law [<u>home</u>, <u>info</u>]
28. <u>protocol</u> : Travel Industry Dictionary [<u>home</u>, <u>info</u>]
29. <u>Protocol</u> : THE 'LECTRIC LAW LIBRARY'S REFERENCE ROOM [<u>home</u>, <u>info</u>]
30. <u>Protocol</u> : eyefortransport e-commerce transportation glossary [<u>home</u>, <u>info</u>]
31. <u>Protocol</u> : Glossary of Trade and Shipping Terms [<u>home</u>, <u>info</u>]

➤ <u>Computing</u> (18 matching dictionaries)

32. <u>protocol</u> : Free On-line Dictionary of Computing [<u>home</u>, <u>info</u>]
33. <u>protocol</u> : Netlingo [<u>home</u>, <u>info</u>]
34. <u>protocol</u> : Hutchinson Dictionary of Computers, Multimedia, and the Internet [<u>home</u>, <u>info</u>]
35. <u>protocol</u> : CCI Computer [<u>home</u>, <u>info</u>]
36. <u>protocol</u> : Butterfly Glossary (networking terminology) [<u>home</u>, <u>info</u>]
37. <u>protocol</u> : CNET Internet Glossary [<u>home</u>, <u>info</u>]
38. <u>protocol</u> : Computer Telephony & Electronics Dictionary and Glossary [<u>home</u>, <u>info</u>]
39. <u>protocol</u> : Glossary of Internet Terms [<u>home</u>, <u>info</u>]
40. <u>Protocol</u> : TECHNICAL [<u>home</u>, <u>info</u>]
41. <u>protocol</u> : Dictionary of Computing and Digital Media [<u>home</u>, <u>info</u>]
42. <u>protocol</u> : whatis? [<u>home</u>, <u>info</u>]
43. <u>Protocol</u> : Internet and Unix [<u>home</u>, <u>info</u>]
44. <u>Protocol</u> : Internet Terms [<u>home</u>, <u>info</u>]
45. <u>Protocol</u> : Internet Terms [<u>home</u>, <u>info</u>]
46. <u>protocol</u> : Glossary of Communications, Computer, Data, and

h   e   c   c

Information Security Terms [home, info]
47. protocol : Webopedia [home, info]
48. protocol : Hacking Lexicon [home, info]
49. PROTOCOL : SELF PACED INTERNET GUIDE [home, info]

◆ **Medicine** (12 matching dictionaries)

50. protocol : Stedman's Online Medical Dictionary, 27th Edition [home, info]
51. protocol : The On-line Medical Dictionary [home, info]
52. protocol : Dorland's Illustrated Medical Dictionary [home, info]
53. protocol : ABTA Brain Tumor Patients [home, info]
54. Protocol : The TCRC Glossary For Testicular Cancer and Related Conditions [home, info]
55. PROTOCOL : CPCRA AIDS Specific and Clinical Trials Terminology [home, info]
56. PROTOCOL : Lay Terms for Consent Forms [home, info]
57. PROTOCOL : AIDS 101 [home, info]
58. PROTOCOL : Glossary of HIV/AIDS-Related Terms [home, info]
59. protocol : Prostate Cancer Interactive Glossary [home, info]
60. Protocol : Glossary of Lymphoma Terms [home, info]
61. protocol : Dictionary of Cancer Terms [home, info]

◆ **Miscellaneous** (1 matching dictionary)

62. protocol : Political [home, info]

◆ **Religion** (1 matching dictionary)

63. Protocol : Catholic Encyclopedia [home, info]

◆ **Science** (3 matching dictionaries)

64. Protocol : AGI GIS [home, info]
65. protocol : US Envirionmental Protection Agency Terminology Reference System [home, info]
66. protocol : FOLDOP - Free On Line Dictionary Of Philosophy [home, info]

◆ **Sports** (1 matching dictionary)

67. protocol : Hickok Sports Glossaries [home, info]

➡ **Tech** (9 matching dictionaries)

68. Protocol : ATM Forum Glossary [home, info]
69. Protocol : AUTOMOTIVE TERMS [home, info]
70. Protocol : FLW Technical [home, info]
71. Protocol : Glossary of video terms [home, info]
72. protocol : National Instruments [home, info]
73. Protocol : Data Acquisition [home, info]
74. protocol : Rane Professional Audio Reference [home, info]
75. PROTOCOL : Space and Electronic Warfare Lexicon [home, info]
76. Protocol : Web Hosting Glossary [home, info]

> Phrases that include *protocol*: file transfer protocol, hypertext transfer protocol, transmission control protocol, internet protocol, simple mail transfer protocol, *more...*
>
> Words similar to *protocol*: protocoled, protocoling, protocolled, protocolling, communications protocol, *more...*
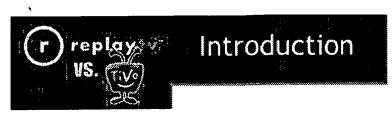
Additional searches for *protocol...*

Search completed in 0.254 seconds.

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h   e   c   c

Introduction

ReplayTV and TiVo are personal television (PTV) products. Sometimes they go by personal video recorders, digital video recorders, digital network recorders, smart TV, video recording computers, time-shifted television, hard disk recorders, personal television receivers, television portals, or on-demand TV. Choose your favorite, or coin your own lingo by mixing and matching the above terms. Some naming conventions distinguish between the hardware unit (supplied by a third-party manufacturer) and the personal television service (supplied by SonicBlue or TiVo). This site only covers "stand-alone" units. Other personal television systems are available that combine functionality with satellite receivers, televisions, and cable boxes.

What do they do? They sit in between your television and your cable box, satellite receiver and/or antenna. Ideally, they act as a personal assistant, changing channels for you, recording programs that interest you, and helping you watch them when you want. They are more than just digital VCRs. Features common to both units include live TV buffering (the ability to pause/rewind television shows as they are broadcast), simultaneous digital recording and playback (the ability to watch a *recorded* show while recording another), short-term storage of recordings, dumping of recordings to videotape for long-term storage, an electronic program guide (EPG), time-shifted viewing, and timed recordings.

ReplayTV Models. SonicBlue's primary offering is the 5000 series, consisting of the 5040 (40-hour, replacing the 4040 and 4504), 5080 (80-hour, replacing the 4080 and 4508), 5160 (160-hour, replacing the 4160 and 4516), and the 5320 (320-hour, replacing the 4532). Panasonic's "Showstopper" models are discontinued, which were the PV-HS1000 (20-hour), PV-HS2000 (30-hour), and PV-HS3000 (60-hour). ReplayTV manufactured their own models for a while, back before they were acquired by SonicBlue. These were the 2001 (10-hour), 2003 (14-hour), 2020 (20-hour), 3020 (20-hour), 2004 (28-hour), 3030 (30-hour), and 3060 (60-hour). It is possible to still purchase many of these older models, and they will still work, although only the SonicBlue models will receive any further software upgrades.

TiVo Models. TiVo is now manufacturing their own branded unit, called the TiVo Series2 (60 and 80-hour). AT&T Broadband sells the 130040/230040 (40-hour), 140060 (60-hour), and 240080 (80-hour), all Series2-compatible. Philips models are designated PTV100/HDR112 (14 hours), HDR212 (20 hours), PTV300/HDR312 (30 hours), and HDR612 (60 hours), but it appears only the 60-hour is still in manufacture. Sony discontinued model SVR-2000 (30 hours), but recently released the SVR-3000 (80 hours), which is Series2-compatible. Thomson's model (40 hours) is manufactured under the Scenium brand and available in the U.K. only. All the discontinued models are forward-compatible and will work with the TiVo service.

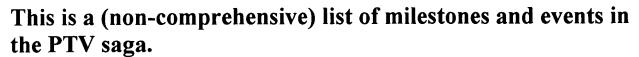**Feedback.** If you own a ReplayTV or TiVo unit -- particularly the

SonicBlue and TiVo Series2 offerings -- please let me know how I'm doing. Submit additions, corrections, and comments to Eric W. Lund. Thanks to everyone who has written!

Links. TiVo Community Forum | PVR Compare (informative, highly recommended) | ReplayTV Revealed (Steve Martin) | AV Science Bulliten Board (PTV discussion forum) | iwantptv.com | Marc's TiVo Experience (Marc Shannon) | ReplayTV Notes (George Snyder) | The Future of Television (Don Meyer) | TiVo FAQ | TiVo UK FAQ | ReplayTV FAQ | TiVo News | SonicBlue official website | TiVo official website | Can I really cram these links in here, or what?

Changes to this site are annotated on the History page.

The History

This is a (non-comprehensive) list of milestones and events in the PTV saga.

April 2000	The 30-Hour TiVo model is selling for $400 at retailers.
March 2000	ReplayTV introduces the model 3000.
March 2000	ReplayTV releases version 2.0 of their software.
Nov 2, 1999	ReplayTV has introduced a new model, the 2020 which has 20 hours of recording time for $700.
Nov 1999	TiVo available through several online retailers.
Oct 1999	The new Fall Prime Time Season has arrived, and after trying to set up both devices to deal with it, here's my experiences.
Sep 1999	TiVo is now being sold through the Best Buy & Sears chains of retail stores.
Sep 30, 1999	TiVo has gone public! As of Sep 30, 1999 shares of stock are being traded.
Sep 8, 1999	TiVo and Sony announce deal.
Jun 8, 1999	ReplayTV and Panasonic announce deal.

Jun 8, 1999	ReplayTV and Panasonic announce deal.
Mar 1999	ReplayTV ships units to consumers.
Mar 1999	TiVo ships units to consumers.

Software for the Palm OS® Platform

Please address any comments or questions to donm@sgsw.com

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Set      Items    Description
S1         57     AU='TOBIAS M':AU='TOBIAS M W K' OR AU='TOBIAS MARTIN' OR A-
                  U='TOBIAS MARTIN B'
S2         12     AU='KITE B' OR AU='KITE BEVERLEY' OR AU='KITE BEVERLY'
S3          4     AU='BROWN MATHEWS'
S4          4     S1 AND S2 AND S3
S5         57     S1 OR S2 OR S3
S6         10     S5 AND IC=(G06F? OR H04N?)
File 347:JAPIO Oct 1976-2003/Jan(Updated 030506)
         (c) 2003 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2003/May W04
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030529,UT=20030522
         (c) 2003 WIPO/Univentio
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200334
         (c) 2003  Thomson Derwent
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6/5/1   (Item 1 from file: 348)

01199971
DISTRIBUTED PRODUCTION SYSTEM FOR DIGITALLY ENCODING INFORMATION
VERTEILTES PRODUKTIONSSYSTEM ZUR DIGITALEN ENKODIERUNG VON INFORMATION
SYSTEME DECENTRALISE DE PRODUCTION D'INFORMATIONS A CODAGE NUMERIQUE
PATENT ASSIGNEE:
  Loudeye Technologies, Inc., (3093910), 414 Olive Way, Suite 300, Seattle,
    WA 98101, (US), (Applicant designated States: all)
INVENTOR:
  TOBIAS, Martin , 3601 East Union, Seattle, WA 98122, (US)
  KITE, Beverley , 420 N/W 73rd, Seattle, WA 98117, (US)
  BROWN, Mathews , 1118 E. John Street, Seattle, WA 98102, (US)
  LINDVALL, Eric, 2648 14th Avenue W, 1, Seattle, WA 98119, (US)
  OBERLANDER, Jeffrey, 3231 42nd Avenue SW, Seattle, WA 98116, (US)
  ROBERTS, Aron, 1118 E. John Street, Seattle, WA 98102, (US)
  HANSEN, Anna, 367 Glacier Lane, Port Angeles, CA 98363, (US)
  MALLEY, Gregory, 512 32nd Ave, Seattle, WA 98122, (US)
  SUZUKI, Ken, 510 Lakeside Avenue, S. 10, Seattle, WA 98144, (US
LEGAL REPRESENTATIVE:
  Dendorfer, Claus, Dr. et al (85562), Wachtershauser & Hartz Tal 29, 80331
    Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1151612 A1   011107 (Basic)
                              WO 200048400   000817
APPLICATION (CC, No, Date):   EP 2000908575 000211; WO 2000US3414   000211
PRIORITY (CC, No, Date): US 119762 P 990211; US 120206 P 990211; US 120207
    P 990211; US 120208 P 990211; US 120209 P 990211; US 156817 P 990929;
    US 499961 000208
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: **H04N-007/24**
CITED PATENTS (WO A): XP 2142651   ; JP 1019874 A
CITED REFERENCES (WO A):
  WO 9641285 A
  "Encoding.com Launches Rich Media Advertising Service to Enable Use of
    Audio and Video Advertising on the Net" ONLINE , 26 October 1998
    (1998-10-26), pages 1-2, XP002142651 Retrieved from the Internet:
    <URL:encoding.com/company/news/releases/pr 10 26 98.html> retrieved on
    2000-07-11
  PATENT ABSTRACTS OF JAPAN vol. 013, no. 198 (E-756), 11 May 1989
    (1989-05-11) & JP 01 019874 A (MATSUSHITA ELECTRIC WORKS LTD), 23
    January 1989 (1989-01-23);
NOTE:
  No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 001011 A1 International application. (Art. 158(1))
  Application: 001011 A1 International application entering European
                            phase
  Application: 011107 A1 Published application with search report
  Examination: 011107 A1 Date of request for examination: 20010809
  Change: 020502 A1 Inventor information changed: 20020313
LANGUAGE (Publication,Procedural,Application): English; English; English

6/5/2   (Item 2 from file: 348)

01199970
SYSTEM FOR AUTOMATED COMPREHENSIVE REMOTE SERVICING FOR MEDIA INFORMATION
SYSTEM FUR AUTOMATISIERTE UMFASSENDE FERNWARTUNG VON MEDIENINFORMATIONEN
SYSTEME   RELATIF A UN TELESERVICE AUTOMATISE ETENDU FOURNISSANT DES
    INFORMATIONS SUR DES MEDIA
PATENT ASSIGNEE:
  Loudeye Technologies, Inc., (3093910), 414 Olive Way, Suite 300, Seattle,

WA 98101, (US), (Applicant designated States: all)
INVENTOR:
   TOBIAS, Martin , 3601 East Union, Seattle, WA 98122, (US)
   KITE, Beverley , 420 N/W 73rd, Seattle, WA 98117, (US)
   BROWN, Mathews , 1118 E. John Street, Seattle, WA 98102, (US
LEGAL REPRESENTATIVE:
   Dendorfer, Claus, Dr. et al (85562), Wachtershauser & Hartz Tal 29, 80331
      Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1151611 A1 011107 (Basic)
                              WO 200048399 000817
APPLICATION (CC, No, Date):   EP 2000908574 000211; WO 2000US3413 000211
PRIORITY (CC, No, Date): US 119762 P 990211; US 120209 P 990211; US 120207
   P 990211; US 120206 P 990211; US 120208 P 990211; US 156817 P 990929
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
   LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: **H04N-007/24**
CITED PATENTS (WO A): XP 2142651
CITED REFERENCES (WO A):
   WO 9641285 A
   US 5852435 A
   "Encoding.com Launches Rich Media Advertising Service to Enable Use of
      Audio and Video Advertising on the Net" ONLINE , 26 October 1998
      (1998-10-26), pages 1-2, XP002142651 Retrieved from the Internet:
      <URL:encoding.com/company/news/releases/pr 10 26 98.html> retrieved on
      2000-07-11 ;
NOTE:
   No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):
   Application: 001011 A1 International application. (Art. 158(1))
   Application: 001011 A1 International application entering European
                              phase
   Application: 011107 A1 Published application with search report
   Examination: 011107 A1 Date of request for examination: 20010809
LANGUAGE (Publication,Procedural,Application): English; English; English

   6/5/3   (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00735057   **Image available**
DISTRIBUTED PRODUCTION SYSTEM FOR DIGITALLY ENCODING INFORMATION
SYSTEME DECENTRALISE DE PRODUCTION D'INFORMATIONS A CODAGE NUMERIQUE
Patent Applicant/Assignee:
   LOUDEYE TECHNOLOGIES INC, 414 Olive Way, Suite 300, Seattle, WA 98101, US
      , US (Residence), US (Nationality)
Inventor(s):
   TOBIAS Martin , 3601 East Union, Seattle, WA 98122, US
   KITE Beverley , 420 N/W 73rd, Seattle, WA 98117, US
   BROWN Mathews , 1118 E. John Street, Seattle, WA 98102, US
   LINDVALL Eric, 2648 14th Avenue W, #1, Seattle, WA 98119, US
   OBERLANDER Jeffrey, 3231 42nd Avenue SW, Seattle, WA 98116, US
   ROBERTS Aron, 1118 E. John Street, Seattle, WA 98102, US
   HANSEN Anna, 367 Glacier Lane, Port Angeles, CA 98363, US
   MALLEY Gregory, 5509 Kensington Place North, Seattle, WA 98103, US
   SUZUKI Ken, 510 Lakeside Avenue, S. #10, Seattle, WA 98144, US
Legal Representative:
   HICKMAN Brian D, Hickman Palermo Truong & Becker LLP, 1600 Willow Street,
      San Jose, CA 95125-5106, US
Patent and Priority Information (Country, Number, Date):
   Patent: WO 200048400 A1 20000817 (WO 0048400)
   Application: WO 2000US3414 20000211   (PCT/WO US0003414)
   Priority Application: US 99119762 19990211; US 99120206 19990211; US
      99120207 19990211; US 99120208 19990211; US 99120209 19990211; US
      99156817 19990929; US 2000499961 20000208
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CZ DE DK DM
   EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT

LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04N-007/24**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 10742

English Abstract
  A method and system for encoding ditigal information is disclosed.
  According to the method, media program information is captured and used
  to produce a media program file. An encoding request is received from a
  client which requests that the media program information be encoded in
  one or more encoding formats. A set of encoding engines are selected that
  can encode the media program information in each of the one or more
  encoding formats. The media program file is then sent to the selected set
  of encoding engines to encode the media program information in the one or
  more encoding formats.

French Abstract
  L'invention porte sur un procede et un systeme de codage d'informations.
  Le procede consiste a saisir des informations sur des programmes de media
  et a les utiliser pour produire un fichier de programmes. Une demande de
  codage emanant d'un client demande que les informations sur les
  programmes soit codees en un ou plusieurs formats de codage. Un ensemble
  selectionne d'automates de codage code lesdites informations dans le ou
  les formats de codage. Le fichier de programme est alors transmis auxdits
  automates pour coder les programmes dans le ou les formats de codage.

Legal Status (Type, Date, Text)
Publication   20000817 A1 With international search report.
Publication   20000817 A1 Before the expiration of the time limit for
                            amending the claims and to be republished in the
                            event of the receipt of amendments.
Examination   20001102 Request for preliminary examination prior to end of
                            19th month from priority date

  6/5/4   (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00735056   **Image available**
SYSTEM FOR AUTOMATED COMPREHENSIVE REMOTE SERVICING FOR MEDIA INFORMATION
SYSTEME RELATIF A UN TELESERVICE AUTOMATISE ETENDU FOURNISSANT DES
    INFORMATIONS SUR DES MEDIA
Patent Applicant/Assignee:
  LOUDEYE TECHNOLOGIES INC, 414 Olive Way, Suite 300, Seattle, WA 98101, US
    , US (Residence), US (Nationality)
Inventor(s):
  TOBIAS Martin , 3601 East Union, Seattle, WA 98122, US
  KITE Beverley , 420 N/W 73rd, Seattle, WA 98117, US
  BROWN Mathews , 1118 E. John Street, Seattle, WA 98102, US
Legal Representative:
  BRANDT Carl L, McDermott, Will & Emery, 600 13th Street, NW, Washington,
    DC 20005-3096, US
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200048399 A1 20000817 (WO 0048399)
  Application: WO 2000US3413 20000211 (PCT/WO US0003413)
  Priority Application: US 99119762 19990211; US 99120209 19990211; US
    99120207 19990211; US 99120206 19990211; US 99120208 19990211; US

· 99156817 19990929
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CZ DE DK DM
    EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LS LT
    LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR
    TT TZ UA UG UZ VN YU ZA ZW
    (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
    (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04N-007/24**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 8376

English Abstract
  A method and system for comprehensive remote servicing of media program
  information is disclosed. According to the method, automated facilities
  are provided for uploading media program information through an internet
  connection to an automated encoding system. An encoding request is
  received from a client which requests that the media program information
  be encoded in one or more encoding formats to produce
  publication-ready-internet-enabled media information. Automated
  facilities also provide ancillary services associated with the
  publication-ready-internet-enabled media information such as organization
  control, design control and publication control of the
  publication-ready-internet-enabled media information.

French Abstract
  L'invention porte sur un procede et un systeme relatifs a un teleservice
  automatise etendu fournissant des informations sur des programmes de
  media. Le procede recourt a des installations automatisees pour
  telecharger des programmes vers un systeme automatise de codage via une
  connexion Internet. La demande de codage emanant du client precise que
  l'information sur les programmes soit codee en un ou plusieurs formats de
  codage de maniere a obtenir des informations pretes pour la publication
  validees par Internet. Les installations automatisees comportent
  egalement des services annexes associes aux informations pretes pour la
  publication validees par Internet tels que la gestion de l'organisation,
  de la forme et de la publication desdites informations.

Legal Status (Type, Date, Text)
Publication   20000817 A1 With international search report.
Publication   20000817 A1 Before the expiration of the time limit for
                          amending the claims and to be republished in the
                          event of the receipt of amendments.

  6/5/5   (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014595256   **Image available**
WPI Acc No: 2002-415960/200244
XRPX Acc No: N02-327285
  **Integrated voice provision method in communication network, involves
  placing received television programming, data and telephone
  communications in common format, to provide integrated service offering**
Patent Assignee: SANDSTREAM TECHNOLOGIES INC (SAND-N)
Inventor: EASTY A D; ROBBINS P T; **TOBIAS M J** ; WENDT T C
Number of Countries: 096 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200221837	A1	20020314	WO 2001US26203	A	20010821	200244	B
AU 200185187	A	20020322	AU 200185187	A	20010821	200251	

Priority Applications (No Type Date): US 2000644165 A 20000822
Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
WO 200221837   A1 E   53 H04N-007/173
      Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
      CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
      IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
      PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
      Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
      IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200185187   A   H04N-007/173   Based on patent WO 200221837

Abstract (Basic): WO 200221837 A1
      NOVELTY - Television programming, data and telephone communications
   received from a programming source (14), data and telephone networks
   (18,16) respectively, are placed in a common format for integrated
   communication over a single network infrastructure using common
   communication protocol. The communicated data are transmitted to more
   customers (12), to provide integrated service offering.
      DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for
   integrated voice provision system.
      USE - For provision of integrated voice in communication and
   networking field.
      ADVANTAGE - Since all services are provided to customer premises
   using single network infrastructure, problems associated with
   delivering in compatible services are eliminated. Allows for enhanced
   trouble shooting, fault-tolerance access restriction with high
   efficiency.
      DESCRIPTION OF DRAWING(S) - The figure shows an explanatory network
   of integrated delivery voice provision system.
      Customers (12)
      Programming source (14)
      Data and telephone networks (18,16)
      pp; 53 DwgNo 1/15
Title Terms: INTEGRATE; VOICE; PROVISION; METHOD; COMMUNICATE; NETWORK;
   PLACE; RECEIVE; TELEVISION; PROGRAM; DATA; TELEPHONE; COMMUNICATE; COMMON
   ; FORMAT; INTEGRATE; SERVICE; OFFER
Derwent Class: W01; W02
International Patent Class (Main): **H04N-007/173**
File Segment: EPI

   6/5/6   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014051840   **Image available**
WPI Acc No: 2001-536053/200159
Related WPI Acc No: 2000-549204; 2000-664744; 2000-664745
XRPX Acc No: N01-398151
   **Temporal modification incorporation method in streaming media content,
   involves delivering streaming media data to client for playing at
   multiple play rates**
Patent Assignee: LOUDEYE TECHNOLOGIES INC (LOUD-N)
Inventor: **KITE B** ; MATHEWS M; **TOBIAS M**
Number of Countries: 091 Number of Patents: 003
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200124530 A2   20010405   WO 2000US26832   A   20000929   200159   B
AU 200077353 A   20010430   AU 200077353   A   20000929   200159
EP 1221238   A2   20020710   EP 2000967103   A   20000929   200253
                              WO 2000US26832   A   20000929

Priority Applications (No Type Date): US 99156817 P 19990929
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes

WO 200124530 A2 E 26 H04N-007/24
    Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
    CH CN CR CZ DE DK DM DZ EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG
    KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD
    SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
AU 200077353 A   H04N-007/24   Based on patent WO 200124530
EP 1221238 A2 E   H04L-029/06   Based on patent WO 200124530
    Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
    LI LT LU LV MC MK NL PT RO SE SI

Abstract (Basic): WO 200124530 A2
        NOVELTY - The method involves generating one or more temporal media
    files by applying a temporal encoding process to media content.
    Streaming media data is generated based on the temporal media file. The
    streaming media data is delivered to a client (110) which is capable of
    being played at the client at multiple play rates.
        DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
    following:
        (a) Computer readable medium for incorporating temporal
    modifications in streaming media content;
        (b) Server apparatus;
        (c) Method of playing digital content at a client
    USE - Used for streaming media files.
        ADVANTAGE - Provides media content that allows for multiple
    playback speed control at a client. Provides improved method for
    delivering streaming media data and played at a client without
    affecting amplitude of the data. Increases or slows down the speed of
    the media content.
        DESCRIPTION OF DRAWING(S) - The figure shows block diagram of
    temporal encoding system.
        Client (110)
        pp; 26 DwgNo 1A/5
Title Terms: TEMPORAL; MODIFIED; INCORPORATE; METHOD; STREAM; MEDIUM;
  CONTENT; DELIVER; STREAM; MEDIUM; DATA; CLIENT; PLAY; MULTIPLE; PLAY;
  RATE
Derwent Class: W02
International Patent Class (Main): H04L-029/06; **H04N-007/24**
File Segment: EPI

  6/5/7   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013492802   **Image available**
WPI Acc No: 2000-664745/200064
Related WPI Acc No: 2000-549204; 2000-664744; 2001-536053
XRPX Acc No: N00-492691
    Digital information encoding method using distributed production system,
    involves selecting set of encoding engines that can encode media program
    information in each of requested encoding formats
Patent Assignee: LOUDEYE TECHNOLOGIES INC (LOUD-N)
Inventor: BROWN M; HANSEN A; **KITE B** ; LINDVALL E; MALLEY G; OBERLANDER J;
  ROBERTS A; SUZUKI K; **TOBIAS M**
Number of Countries: 088 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200048400	A1	20000817	WO 2000US3414	A	20000211	200064	B
AU 200029888	A	20000829	AU 200029888	A	20000211	200064	
EP 1151612	A1	20011107	EP 2000908575	A	20000211	200168	
			WO 2000US3414	A	20000211		
JP 2002537572	W	20021105	JP 2000599211	A	20000211	200304	
			WO 2000US3414	A	20000211		

Priority Applications (No Type Date): US 2000499961 A 20000208; US 99119762

· P 19990211; US 99120206 P 19990211; US 99120207 P 19990211; US 99120208 P
19990211; US 99120209 P 19990211; US 99156817 P 19990929
Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
WO 200048400 A1 E   37 H04N-007/24
    Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
    CR CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ
    LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
    SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200029888 A   H04N-007/24   Based on patent WO 200048400
EP 1151612   A1 E   H04N-007/24   Based on patent WO 200048400
    Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
    LU MC NL PT SE
JP 2002537572 W   45 G10L-019/00   Based on patent WO 200048400

Abstract (Basic): WO 200048400 A1
        NOVELTY - The encoding request with unique master ID that requests
    media program information to be encoded in predefined encoding formats
    is received, after capturing media program information to be encoded.
    The set of encoding engines that can encode the media program
    information in each of requested encoding formats, are selected. The
    media program information is encoded using selected encoding engines.
        DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
    following:
        (a) digital information encoding system;
        (b) encoding program stored in computer readable medium
        USE - For encoding digital information in storage mediums such as
    VHS or 8-MM tapes, DVD or laser discs, beta cams or digital video
    cassette, compact discs and audio cassettes or 8-track tapes using
    distributed production system connected to LAN, WAN, internet. Also for
    encoding media program from analog or digital computer or from
    satellite or cable feed.
        ADVANTAGE - By encoding media program in multiple encoding formats
    in parallel, the distributed encoding mechanism is able to
    significantly reduce the overhead that is typically required for
    encoding media programs in multiple encoding formats. The common
    parameter interface reduces complexity of user interface and limits the
    specific encoding knowledge that a user is typically required to hold
    in order to properly submit an encoding format. Hard wired circuit can
    be used in place of or in combination with software instructions to
    implement the digital information encoding.
        DESCRIPTION OF DRAWING(S) - The figure shows the diagram explaining
    user interface window that can be used to define set of encoding
    specifications for encoding particular file.
        pp; 37 DwgNo 2/6
Title Terms: DIGITAL; INFORMATION; ENCODE; METHOD; DISTRIBUTE; PRODUCE;
    SYSTEM; SELECT; SET; ENCODE; ENGINE; CAN; ENCODE; MEDIUM; PROGRAM;
    INFORMATION; REQUEST; ENCODE; FORMAT
Derwent Class: P86; T01; W01; W02; W04
International Patent Class (Main): G10L-019/00; **H04N-007/24**
International Patent Class (Additional): G10K-015/02; **H04N-007/173**
File Segment: EPI; EngPI

 6/5/8   (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013492801   **Image available**
WPI Acc No: 2000-664744/200064
Related WPI Acc No: 2000-549204; 2000-664745; 2001-536053
XRPX Acc No: N00-492690
  **Automated media program remote servicing method involves allowing
  selective access to one or more encoded media files over the network**
Patent Assignee: LOUDEYE TECHNOLOGIES INC (LOUD-N)

Inventor: BROWN M; **KITE B** ; **TOBIAS M**
Number of Countries: 088 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200048399	A1	20000817	WO 2000US3413	A	20000211	200064	B
AU 200029887	A	20000829	AU 200029887	A	20000211	200064	
EP 1151611	A1	20011107	EP 2000908574	A	20000211	200168	
			WO 2000US3413	A	20000211		

Priority Applications (No Type Date): US 99156817 P 19990929; US 99119762 P
    19990211; US 99120206 P 19990211; US 99120207 P 19990211; US 99120208 P
    19990211; US 99120209 P 19990211
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 200048399 A1 E 38 H04N-007/24
    Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
    CR CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ
    LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
    SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200029887 A   H04N-007/24   Based on patent WO 200048399
EP 1151611   A1 E   H04N-007/24   Based on patent WO 200048399
    Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
    LU MC NL PT SE

Abstract (Basic): WO 200048399 A1
        NOVELTY - The media program encoded in one or more encoding
    formats, are automatically hosted on server (112a-112c) in response to
    the reception of secondary request from an end-user client (102), to
    host the encoded media files. The server allows selective access to one
    or more encoded media files over the network.
        DETAILED DESCRIPTION - A primary request is received over the
    network from the client to encode the media program file in one or more
    encoding formats. The primary request is serviced by generating one or
    more encoded media files, by encoding the media program in response to
    the reception of the request. An INDEPENDENT CLAIM is also included for
    media program remote servicing program.
        USE - For automated comprehensive remote servicing of media program
    such as audio, photograph, feature films, digital movies.
        ADVANTAGE - The end-user can share the encoded media file with
    his/her family, friends and business associates. Since end-user's media
    program can be encoded in multiple media formats, the comprehensive
    services associated with the publication of encoded media files can be
    provided automatically.
        DESCRIPTION OF DRAWING(S) - The figure shows block diagram of
    automated comprehensive remote servicing system.
        Client (102)
        Servers (112a-112c)
        pp; 38 DwgNo 1/5
Title Terms: AUTOMATIC; MEDIUM; PROGRAM; REMOTE; SERVICE; METHOD; ALLOW;
  SELECT; ACCESS; ONE; MORE; ENCODE; MEDIUM; FILE; NETWORK
Derwent Class: T01; W01; W02; W04
International Patent Class (Main): **H04N-007/24**
File Segment: EPI

 6/5/9   (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013377266   **Image available**
WPI Acc No: 2000-549204/200050
Related WPI Acc No: 2000-664744; 2000-664745; 2001-536053
XRPX Acc No: N00-406295
  **Media content distribution regulation for computer system, involves
  decrypting encrypted media files, on receiving requests from client and**

delivering decrypted file to client, based on distribution rules
Patent Assignee: LOUDEYE TECHNOLOGIES INC (LOUD-N)
Inventor: BROWN M; **KITE B** ; OBERLANDER J; SAWICKI T; SUTTON B; THOMAS K;
 TOBIAS M ; HANSEN A; LINDVALL E; MALLEY G; ROBERTS A; SUZUKI K
Number of Countries: 088 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200048375	A1	20000817	WO 2000US3412	A	20000211	200050	B
AU 200029886	A	20000829	AU 200029886	A	20000211	200062	
EP 1151592	A1	20011107	EP 2000908573	A	20000211	200168	
			WO 2000US3412	A	20000211		
EP 1151612	A1	20011107	EP 2000908575	A	20000211	200168	
			WO 2000US3414	A	20000211		
JP 2002541687	W	20021203	JP 2000599191	A	20000211	200309	
			WO 2000US3412	A	20000211		

Priority Applications (No Type Date): US 99156817 P 19990929; US 99119762 P
 19990211; US 99120206 P 19990211; US 99120207 P 19990211; US 99120208 P
 19990211; US 99120209 P 19990211; US 2000499961 A 20000208
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 200048375 A1 E 56 H04L-029/06
    Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN
    CR CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ
    LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
    SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
AU 200029886 A   H04L-029/06   Based on patent WO 200048375
EP 1151592   A1 E   H04L-029/06   Based on patent WO 200048375
    Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
    LI LT LU LV MC MK NL PT RO SE SI
EP 1151612   A1 E   H04N-007/24   Based on patent WO 200048400
    Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
    LU MC NL PT SE
JP 2002541687 W   54 H04N-007/173 Based on patent WO 200048375
Abstract (Basic): WO 200048375 A1
        NOVELTY - The subscription package with distribution rules and one
    or more encrypted media files, is generated, in response to request and
    delivered to affiliate server connected to network. The affiliate
    server decrypts the encrypted media files, on receiving requests from
    clients connected to network and delivers the decrypted media files to
    clients based on distribution rules.
        DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
    following:
        (a) computer readable medium with instructions for regulating
    distribution of media content over network;
        (b) system for regulating distribution of media content over
    network
        USE - For computer system especially in media distribution system
    such as internet.
        ADVANTAGE - Allows for distribution of media content from affiliate
    servers thus reducing the chance to reproduce unauthorized copies of
    media content.
        DESCRIPTION OF DRAWING(S) - The figure shows the mechanism for
    registering encoded files and associated program, metadata into
    distribution server.
        pp; 56 DwgNo 4/13
Title Terms: MEDIUM; CONTENT; DISTRIBUTE; REGULATE; COMPUTER; SYSTEM;
  ENCRYPTION; MEDIUM; FILE; RECEIVE; REQUEST; CLIENT; DELIVER; FILE; CLIENT
  ; BASED; DISTRIBUTE; RULE
Derwent Class: P85; T01; W01; W02; W04
International Patent Class (Main): H04L-029/06; **H04N-007/173** ;
  H04N-007/24
International Patent Class (Additional): G09C-001/00; H04L-009/08
File Segment: EPI; EngPI

6/5/10   (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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009692483   **Image available**
WPI Acc No: 1993-386037/199348
Related WPI Acc No: 1992-049342
XRPX Acc No: N93-298212
   **Byte swapping circuit selectively ordering bytes of 16 or 32 bit word -
   includes four groups of buffers which are disposed in parallel along
   internal bus of circuit.**
Patent Assignee: XYCOM INC (XYCO-N)
Inventor: MARESH A J; **TOBIAS M R**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5265237	A	19931123	US 88281261	A	19881207	199348	B
			US 90500786	A	19900328		

Priority Applications (No Type Date): US 90500786 A 19900328; US 88281261 A
   19881207
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5265237	A		21	G06F-007/00	CIP of application US 88281261

Abstract (Basic): US 5265237 A
        The circuit includes an AT computer having a CPU. A control
   register responsive to the CPU generates four control signals
   indicative of four byte orders. Four byte ordering units responsive to
   the control register selectively order the bytes as A,B,C and D bytes
   and transfers them between the CPU and a VMEbus. A bus is in
   communication with the AT computer and the four byte ordering units.
   The byte ordering units are disposed in parallel with the bus. The
   first byte ordering unit moves the A byte to 24-31 bit positions, the B
   byte to 16-23 bit positions, the C byte to 8-15 bit positions, and the
   D byte to 0-7 bit positions, in response to the first control signal.
   The second byte ordering unit maintains the A byte at 0-7 bit
   positions, the B byte at 8-15 bit positions, the C byte at 16-23 bit
   positions, and the D byte at 24-31 bit positions in response to the
   second control signal.
        The third byte ordering unit moves the A byte to the 8-15 bit
   positions and the B byte to the 0-7 bit positions, in response to the
   third control signal. The fourth byte ordering unit moves the D byte to
   the 8-15 bit positions and the C byte to the 0-7 bit positions, in
   response to the fourth control signal. The control register generates
   one of the four control signals at a time to selectively enable one of
   the byte ordering units to effect a desired byte ordering of the N-bit
   word.
        USE/ADVANTAGE - For interconnecting VMEbus and IBM PC/XT and AT bus
   architectures.
        Dwg.10/10
Title Terms: BYTE; CIRCUIT; SELECT; ORDER; BYTE; BIT; WORD; FOUR; GROUP;
   BUFFER; DISPOSABLE; PARALLEL; INTERNAL; BUS; CIRCUIT
Derwent Class: T01
International Patent Class (Main): **G06F-007/00**
International Patent Class (Additional): **G06F-013/38**
File Segment: EPI

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Set      Items    Description
S1       602315   CLIENT? OR VIEWER? OR USER? OR STANDALONE OR STAND()ALONE -
                  OR PC OR PCS OR PERSONAL()COMPUTER? OR WORKSTATION? OR WORK()-
                  STATION? OR NODE?
S2       915359   REQUEST? OR ASK OR ASKS OR ASKED OR ASKING OR PETITION? OR
                  CALL()(ON OR UPON) OR QUER? OR QUESTION? OR INQUIR? OR DEMAND?
                  OR REQUISITION OR APPLY OR APPLYING
S3       1999152  CAPTUR? OR MEMORY OR CACHE? OR STORE? ? OR STORING OR SAVE
                  OR SAVING OR KEEP? ? OR KEEPING
S4       1830661  SOURCE()FILE? OR (TV OR TELEVISION OR RADIO)()(SHOW? OR PR-
                  OGRAM? OR BROADCAST?) OR MEDIA()ASSET? OR VIDEO? OR AUDIO? OR
                  MULTIMEDIA OR MEDIA OR ENTERTAINMENT()INFORMATION OR DATA
S5       3111402  TIME OR SCHEDULE? OR PERIOD OR DURATION OR SIMULTANEOUS? OR
                  CONCURRENT?
S6       286682   ENCOD??? OR DECOD??? OR ENCRYPT??? OR CIPHER? OR CYPHER? OR
                  DECRYPT? OR CYPHERTEXT OR ENCYPHER? OR UNCOD? OR UNENCRYPT? -
                  OR ENCIPHER? OR UNCOD? OR DECIHER? OR UNCYPHER? OR UNCYPHER? -
                  OR CYPTO?
S7       626997   PUBLISH? OR ISSUE OR DISPURS? OR DISTRIBUT?
S8       1991003  DIFFERENT OR ANOTHER OR SEPARATE OR TARGET
S9       4524626  TRANSFER? OR STREAM? OR SEND? OR TRANSMIT? OR TRANSMISSION
                  OR GENERAT? OR PLAY? OR BROADCAST?
S10      1681     S1 AND S2 AND S3 AND (S4 (3N) S5)
S11      111      S10 AND S6
S12      888      S7 AND (S8 (3N) S5) AND S9
S13      0        S11 AND S12
S14      1695     S7 AND (S8 (3N) S5)
S15      0        S11 AND S14
S16      1        S11 AND (S7 (3N) S5)
S17      2370     S2 AND S3 AND S4 AND S5 AND S6
S18      4896886  S7 OR S9
S19      15831    S18 AND (S8 (3N) S5)
S20      27       S17 AND S19
S21      19       S20 AND IC=(G06F? OR H04N? OR G11B?)
File 347:JAPIO Oct 1976-2003/Jan(Updated 030506)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200334
         (c) 2003  Thomson Derwent
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06464472   **Image available**
DATA   DISTRIBUTION METHOD

PUB. NO.:   2000-050047 [JP 2000050047 A]
PUBLISHED: February 18, 2000 (20000218)
INVENTOR(s):   YODA AKIRA
APPLICANT(s):   FUJI PHOTO FILM CO LTD
APPL. NO.:   10-212801 [JP 98212801]
FILED: July 28, 1998 (19980728)
INTL CLASS: **H04N-001/387** ; **G06F-012/14** ; **G06F-013/00** ; G09C-005/00;
                G11B-020/10 ; H04L-012/54; H04L-012/58; **H04N-007/08** ;
                H04N-007/081

ABSTRACT
PROBLEM TO BE SOLVED: To discriminate whether a person has proprietry
rights or not by burying information specifying a **distribution**
destination opposite party and more preferably, the person having the
propriety rights in **data** in an electronic watermark form which is
inseparable from the **data** in **distributing** the **data** such as picture
data and sound **data** to a person except for the person having the
proprietry rights.
SOLUTION: When a client 12 **requests** access to a **stored** picture of a
picture server 10, the input of information specifying the client 12 is
requested from the picture server 10. Client side information and
information such as on access date/ **time** and use **target** classification
of which the client 12 inputs and possessor information from the picture
server 10 which corresponds to the picture, are buried in picture **data** 20
by a watermark **encoder** 13. Buried information is also divided to
respective information such as an alteration preventing code with weak
resistance, a client with strong resistance, the access date/ **time** , an
author and portrait rights. Thus, the proprietorial rights can be insisted
and the presence or absence of the alteration of the **data** can be
discriminated.

05669962   **Image available**
DEVICE AND METHOD FOR SUPPLYING **VIDEO** MATERIAL

PUB. NO.:   09-284762 [JP 9284762 A]
PUBLISHED: October 31, 1997 (19971031)
INVENTOR(s):   YOSHINARI HIROMI
                SUZUKI TAKAO
APPLICANT(s):   SONY CORP [000218] (A Japanese Company or Corporation), JP
                (Japan)
APPL. NO.:   08-091597 [JP 9691597]
FILED: April 12, 1996 (19960412)
INTL CLASS: [6] **H04N-007/24** ; **H04N-007/08** ; **H04N-007/081**
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)

ABSTRACT
PROBLEM TO BE SOLVED: To evade the failure of a VBV butter and to **keep**
the continuity of a joint by unifying a VBV buffer occupancy amount at the
time of connecting **different** insertion materials with each other.

SOLUTION: A program **stream** ps1 is **encoded** in a first MPEG **encoder** 113
and the obtained bit **generation** amount information is sent to a host CPU
114. By the control of the CPU 114 by it, a second MPEG **encoder** 115

compression- **encodes** the **stream** ps1 so as to make a bit rate same in the respective insertion materials and the VBV buffer occupancy amount of a splice point is unified so as to continue images after splicing at the **time** of the transportation **streams** of the respective insertion materials later. The compression **encoded** bit **stream** of the output of the **encoder** 115 is turned to the transportation **stream** TS1 in a primary MUX 116 and **stored** in a material server 21. Similarly, the **streams** TS2-4 from the other insertion material **encoders** 120-140 are **stored** as well and taken out from the server 21, combined and connected by the **request** of a user.

21/5/3   (Item 3 from file: 347)
DIALOG(R)File 347:JAPIO
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04927184   **Image available**
INTERRUPTION CONTROL SYSTEM

PUB. NO.:   07-219784 [JP 7219784 A]
PUBLISHED: August 18, 1995 (19950818)
INVENTOR(s):   IKUMICHI YUUICHI
               KAMIYA TOSHIZANE
APPLICANT(s): MEIDENSHA CORP [000610] (A Japanese Company or Corporation),
               JP (Japan)
APPL. NO.:   06-007956 [JP 947956]
FILED: January 28, 1994 (19940128)
INTL CLASS: [6] **G06F-009/46**
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)
JAPIO KEYWORD:R131 (INFORMATION PROCESSING -- Microcomputers &
               Microprocessers)

                              ABSTRACT
PURPOSE: To prevent the loss of interval timer interruption.

CONSTITUTION: In this interruption control system, an interruption control part 303 receives an interruption signal **generated** at specified periods from a timer circuit 301 and a general interruption signal, a processor 307 interrupt-processes from an interruption **request** from the interruption control part and vector **data** , and at the **time** of **generating another** interruption while this processing, the interruption control part holds the interruption state for one **time** for each interruption signal. In the interruption control system, an interruption state holding circuit 304 **stores** and holds the **generation** of an interval timer interruption signal and an NMI information circuit 305 NMI-informs the processor with a second interval timer interruption signal so as to execute an interval timer interruption processing. A vector **decoder** circuit 306 releases the states of the interruption state holding circuit and the NMI information circuit when the interval timer interruption processing is finished.

21/5/4   (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

04378373   **Image available**
BROADCAST RECEPTION RECORDING AND REPRODUCING DEVICE

PUB. NO.:   06-022273 [JP 6022273 A]
PUBLISHED: January 28, 1994 (19940128)
INVENTOR(s):   KITAMURA MASAYOSHI
               ARAOKA MASAHIRO.
               NISHI TOMOYA
APPLICANT(s): VICTOR CO OF JAPAN LTD [000432] (A Japanese Company or
               Corporation), JP (Japan)
APPL. NO.:   04-194979 [JP 92194979]
FILED: June 29, 1992 (19920629)

INTL CLASS: [5] H04N-005/91 ; G11B-027/00 ; H04N-005/76 ; H04N-005/93

ABSTRACT

PURPOSE: To reproduce program information immediately by displaying a list
of **stored** program information and selecting the program information from
the list.

CONSTITUTION: The **broadcast** reception recording and reproducing device
consists of an antenna 5 and a tuner 6 receiving **broadcast** program
information 1, a recording reproduction controller 9 controlling the entire
device, a key pad 7 used to enter the operation content, a timer 11
measuring a recording **time** 3 of the received program information 1, an
 encoder 10 **applying** compression coding to the program information 1, a
disk recorder 12 recording the program information 1' subject to
compression coding and the recording **time** 3 onto **separate** areas, a
 decoder 13 expanding the program information 1' subject to compression
coding and **decoding** it into the original signal and a display device 14
outputting an **audio** signal and displaying a moving picture.

21/5/5   (Item 5 from file: 347)
DIALOG(R)File 347:JAPIO
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03211262   **Image available**
FACSIMILE EQUIPMENT

ABSTRACT

PURPOSE: To facilitate the operation of an operator, and to realize the
reduction of a communication error or the shortening of a communication
 time by outputting a **different** operator call tone every line, and
 storing beforehand the parameter of a line to be connected in a **memory** .

CONSTITUTION: **Data** is **decoded** by a secondary code **decoding** circuit 17
into an MR or an MH code a remote party facsimile 32 **requests** , and is
modulated by a MODEM 19, and is **transmitted** from an external NCU 23 to a
facsimile 32 through a line wire 31. After the desired **data** is
 transmitted , **transmission** post-procedure is executed by a G3 facsimile
procedure by using the MODEM 19 and the external NCU 23. It is checked
whether the post-procedure processing is an operator call post-procedure or
not, and in the case of the operator call post-procedure, operator call
processing is executed, and it is shown that it is an operator call from
the line wire 31. A speaker drive circuit 35 is instructed to output a call
tone peculiar to a line wire operator call, and the peculiar call tone by
which it can be easily recognized that it is the operator call from the

line wire is outputted from a speaker 36.

21/5/6   (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO
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03156196   **Image available**
DISK REPRODUCING DEMODULATOR AND MUSE **DECODER**

PUB. NO.:   02-131696 [JP 2131696 A]
PUBLISHED: May 21, 1990 (19900521)
INVENTOR(s):   KITAURA HIROSHI
                 FURUMIYA SHIGERU
APPLICANT(s):   MATSUSHITA ELECTRIC IND CO LTD [000582] (A Japanese Company
                 or Corporation), JP (Japan)
APPL. NO.:   63-286144 [JP 88286144]
FILED: November 11, 1988 (19881111)
INTL CLASS: [5] **H04N-009/85**
JAPIO CLASS: 44.6 (COMMUNICATION -- Television)
JAPIO KEYWORD: R101 (APPLIED ELECTRONICS -- **Video** Tape Recorders, VTR);
                 R102 (APPLIED ELECTRONICS -- **Video** Disk Recorders, VDR)
JOURNAL: Section: E, Section No. 962, Vol. 14, No. 368, Pg. 59, August
                 09, 1990 (19900809)

ABSTRACT
PURPOSE: To facilitate the analog conversion of a TBC output by **applying**
sampling of a MUSE signal to **apply** digital signal processing of a **time**
base collector TBC at a **transmission** clock in the case of digital
interface and at a frequency higher than the **transmission** clock in the
case of an analog interface.

CONSTITUTION: A digital MUSE signal having a timewise fluctuation obtained
from an A/D converter 3 is written in a **memory** by using the same clock as
the sampling clock of the A/D converter and read by using **another** clock
whose **time** axis is stable to obtained a MUSE signal whose **time** axis is
stable. A frequency divider circuit 18 and switches 16, 21 are interlocked
and when a digital MUSE signal output is obtained, two frequency divider
circuits have a frequency division radio of 1/3, the switch 16 is closed
and the switch 20 is connected to the side of a phase shift circuit 21.
Moreover, when the analog muse signal output is obtained, the switches are
thrown to the other side. Thus, the digital interface is effectively used.

21/5/7   (Item 7 from file: 347)
DIALOG(R)File 347:JAPIO
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02019400   **Image available**
SEMICONDUCTOR STORAGE DEVICE

PUB. NO.:   61-233500 [JP 61233500 A]
PUBLISHED: October 17, 1986 (19861017)
INVENTOR(s):   TAGUCHI MASAO
                 TAKEMAE YOSHIHIRO
APPLICANT(s):   FUJITSU LTD [000522] (A Japanese Company or Corporation), JP
                 (Japan)
APPL. NO.:   60-074087 [JP 8574087]
FILED: April 08, 1985 (19850408)
INTL CLASS: [4] G11C-029/00; **G06F-011/08**
JAPIO CLASS: 45.2 (INFORMATION PROCESSING -- **Memory** Units); 42.2
                 (ELECTRONICS -- Solid State Components); 45.1 (INFORMATION
                 PROCESSING -- Arithmetic Sequence Units
JOURNAL: Section: P, Section No. 554, Vol. 11, No. 72, Pg. 55, March
                 05, 1987 (19870305)

ABSTRACT

PURPOSE: To equalize required write **time** on a DRAM having an ECC circuit to that having no ECC circuit by constituting a parity **data** cell array of a **memory** where **data** write and read are attained **simultaneously** through **separate** systems independently.

CONSTITUTION: A check circuit 34 uses a clock .phi.(sub 3) to **apply** humming **decoding** to **data** in a register 28, that is, read **data** + parity **data** + write **data**, **generates** a syndrome and **stores** it in a register 30. When column **decoders** 14, 18 **apply** bit wire selection in a column address CAj, a column address CAi at preceding write is inputted to a column **decoder** 20 to **apply** bit line selection of a cell array 16. The **data** on a parity **data** bus 26 is inverted according to the output of the register 30 by an inverting circuit 46 and the result is written on a **memory** cell at a cross point between the selection bit line and the word line WLi. The syndrome this **time** is written on the same **memory** cell of the cell array 16 at the next write.

21/5/8   (Item 8 from file: 347)
DIALOG(R)File 347:JAPIO
(c) 2003 JPO & JAPIO. All rts. reserv.

01718346   **Image available**
MICROPROGRAM CONTROL SYSTEM

PUB. NO.:   60-196846 [JP 60196846 A]
PUBLISHED: October 05, 1985 (19851005)
INVENTOR(s):   KAWAGISHI KYOJI
APPLICANT(s):   NEC CORP [000423] (A Japanese Company or Corporation), JP
                 (Japan)
APPL. NO.:   59-052898 [JP 8452898]
FILED: March 19, 1984 (19840319)
INTL CLASS: [4] **G06F-009/22 ; G06F-009/46**
JAPIO CLASS: 45.1 (INFORMATION PROCESSING -- Arithmetic Sequence Units)
JOURNAL: Section: P, Section No. 433, Vol. 10, No. 53, Pg. 35, March
                 04, 1986 (19860304)

                        ABSTRACT
PURPOSE: To attain multiplex interruption in accessing by comparing interruption level information sent at the **time** of a reading **request** with a current one, and when both the **data** are different each other, **storing** the read-out **data** in a **data** **storing** part corresponding to the interruption level **generated** at an access **time** .

CONSTITUTION: If an interruption is **generated** immediately after a reading **request** , a program goes to an interruption processing routine, ''1'' is added to an interruption level signal and reading **data** 103 and an interruption level signal 102 obtained at the **time** of a reading **request** are sent. Since the interruption level signal at an access **time** is **different** from a current one, the former signal is **decoded** by a **decoder** 5 one address signal corresponding to said level signal is selected out of address signals 501-503 and the reading **data** 103 are set up in one register corresponding to the selected signal out of registers 41-43. Then ''1'' is subtracted from the interruption level signal by executing a return microinstruction or the like, a selector 7 selects an output 601 and a selector 6 selects **data** in the registers 41-43 to read out **data** corresponding to the reading microinstruction to an output 701.

21/5/11   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012934344   **Image available**
WPI Acc No: 2000-106191/200009
Related WPI Acc No: 1999-429806
XRPX Acc No: N00-081552

Interactive application modification system for client server application

Patent Assignee: ONLINE ANYWHERE (ONLI-N); YAHOO INC (YAHO-N); YAHOO CORP (YAHO-N)
Inventor: MENDHEKAR A; VISHWANATH M
Number of Countries: 087   Number of Patents: 008
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9966673	A1	19991223	WO 99US12955	A	19990611	200009	B
AU 9945560	A	20000105	AU 9945560	A	19990611	200024	
EP 1086553	A1	20010328	EP 99928509	A	19990611	200118	
			WO 99US12955	A	19990611		
US 6216157	B1	20010410	US 97970735	A	19971114	200122	
			US 9898670	A	19980617		
CN 1312995	A	20010912	CN 99809735	A	19990611	200202	
KR 2001071516	A	20010728	KR 2000714410	A	20001218	200208	
JP 2002518766	W	20020625	WO 99US12955	A	19990611	200243	
			JP 2000555391	A	19990611		
BR 9911281	A	20030107	BR 9911281	A	19990611	200309	
			WO 99US12955	A	19990611		

Priority Applications (No Type Date): US 9898670 A 19980617; US 97970735 A 19971114

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9966673	A1	E	38	H04L-012/28	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 9945560	A			H04L-012/28	Based on patent WO 9966673
EP 1086553	A1	E		H04L-012/28	Based on patent WO 9966673

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6216157	B1			G06F-013/38	CIP of application US 97970735
CN 1312995	A			H04L-012/28	
KR 2001071516	A			H04L-012/28	
JP 2002518766	W		33	G06F-013/00	Based on patent WO 9966673
BR 9911281	A			H04L-012/28	Based on patent WO 9966673

Abstract (Basic): WO 9966673 A1
    NOVELTY – An adaptive **transmission** transducer coupled to appliance specific transducer, modifies the appliance specific output based on at least one characteristic of the application and medium of **transmission** to **generate** an adapted output to be delivered through the medium to the client which **decodes** the adapted output to produce a modified version of the interactive application.
    DETAILED DESCRIPTION – The appliance specific transducer (150) modifies the application based on at least one characteristic of the client and at least one characteristic of the application to **generate** an appliance specific output, in response to client's **request** for interactive application. INDEPENDENT CLAIMS are also included for the following:
    (a) server apparatus in server for delivering push application to client through a **transmission** medium;
    (b) client apparatus in client for **generating** modified version of push application received from server;
    (c) method of modifying an interactive application by server;
    (d) method of modifying a push application by server;
    (e) method of **generating** modified version of push application received from server through **transmission** medium by client.
    USE – For application such as page to printer, note to pager, **audio** message to cellular phone, web page to internet enabled computer or palmtop, movie to television, ON-OFF command to switch of microwave oven, central air-conditioning system of house.
    ADVANTAGE – The client can be ultra thin i.e. a low cost device,

with minimal computing power and **memory** capacity as the server has
already adapted or modified the application for the client. Since the
applications can be modified by the server to fit specific clients, the
same content materials can be used for **different** clients. The
development **time** to adapt **different** applications to new type of
client can be significantly reduced.
    DESCRIPTION OF DRAWING(S) - The figure shows the examples of
appliance specific transducers.
    pp; 38 DwgNo 4/9
Title Terms: INTERACT; **APPLY** ; MODIFIED; SYSTEM; CLIENT; SERVE; **APPLY**
Derwent Class: T01; W01
International Patent Class (Main): **G06F-013/00** ; **G06F-013/38** ;
  H04L-012/28
International Patent Class (Additional): **G06F-015/17** ; **G06F-017/30**
File Segment: EPI

 21/5/12   (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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012908580   **Image available**
WPI Acc No: 2000-080416/200007
XRPX Acc No: N00-063681
    Data **security enhancement unit for CD-ROM, DVD** - sends **out basic**
  data **at format corresponding to dummy** data , **based on dummy random**
  number and count value, from respective generator **and counter**
Patent Assignee: MEGACHIPS KK (MEGA-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
JP 11328900   A   19991130   JP 98127276   A   19980511 200007 B

Priority Applications (No Type Date): JP 98127276 A 19980511
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
JP 11328900   A   12 G11B-023/00

Abstract (Basic): JP 11328900 A
    NOVELTY - A **decoder** (52) **decodes** the **encoded** data , based on
  key **data** (KD) **generated** by a **generator** (40). Key **data** is
  synthesized using basic **data** (S) **stored** in a **memory** (24). Basic
  data is then sent out at a format corresponding to dummy **data** , based
  on dummy random number (R) and count value (N), from respective
  generator (23) and counter (22). DETAILED DESCRIPTION - **Encoded** disc
   data recorded by a recording unit (5) is read by a reader (51). The
  basic **data** (S) corresponding to the key **data** is **stored** in the
  memory (24), based on **demand** signal (Q) from the **generator** (40).
  INDEPENDENT CLAIMS are also included for the following: drive unit of
  recording medium; semiconductor device
    USE - For CD-ROM, DVD.
    ADVANTAGE - The need for incorporation of power supply is
  eliminated. Since ·**encoding** i·s done corresponding to the **time**· ·
  sequential **target** , decipherment of communication **data** is prevented.
  DESCRIPTION OF DRAWING(S) - The figure shows block diagram of recording
  medium. (5) Recording unit; (22) Counter; (23,40) **Generators** ; (24)
  Memory ; (51) Reader; (52) **Decoder** .
    Dwg.1/8
Title Terms: **DATA** ; SECURE; ENHANCE; UNIT; CD; ROM; **SEND** ; BASIC; **DATA** ;
  FORMAT; CORRESPOND; DUMMY; **DATA** ; BASED; DUMMY; RANDOM; NUMBER; COUNT;
  VALUE; RESPECTIVE; **GENERATOR** ; COUNTER
Derwent Class: T01; T03; W04
International Patent Class (Main): **G11B-023/00**
International Patent Class (Additional): **G06F-012/14** ; **G11B-019/04** ;
  G11B-023/30
File Segment: EPI

012707596   **Image available**
WPI Acc No: 1999-513705/199943
XRPX Acc No: N99-383344
  Digital satellite broadcast **receiver with karaoke function for e.g.
  small-scale saloon - has switching device which deviates** audio signal
  from decoder **and analog** audio **signal from MPEG2 selectively, and
  supplies both signals to aural output terminal**
Patent Assignee: DAIICHI KOSHO KK (DAII-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11224093	A	19990817	JP 9827298	A	19980209	199943	B

Priority Applications (No Type Date): JP 9827298 A 19980209
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11224093	A		7	G10K-015/04	

Abstract (Basic): JP 11224093 A
     NOVELTY - A switching device (SW1) selectively deviates the **audio**
  signal from a **decoder** (16) and the analog **audio** signal from an
  MPEG2 (22) and supplies both signals to an aural output terminal (25).
  An on-screen display circuit (17) derives the **video** image with
  character row of words from the **decoder** , based on the karaoke **data**
  read-out from the MPEG2, and supplies predetermined **video** to an
  output terminal (24). DETAILED DESCRIPTION - A cartridge interface
  circuit (21) stores the karaoke **data** and accompaniment music with
  words read-out from a karaoke cartridge (20) in digital format. The
  MPEG2 outputs the accompaniment music using the karaoke **data** , when a
  demand from the switching device and on-screen display is received by
  user input to an interface circuit (5).
     USE - For small-scale saloon, restaurant and **store** .
     ADVANTAGE - Offers space **saving** suitable for limited space e.g.
  store since large-scale CD-ROM **player** for karaoke **video** is not
  provided. Offers cost effectiveness since separate display and speaker
  is unnecessary. Offers labor **saving** by performing automatic fee
  collection and displaying the music selection directly without using
  table of contents book. Maintains reproduction of fresh **video** from
  external **broadcasting** station **different** each **time** . DESCRIPTION OF
  DRAWING(S) - The figure shows the block diagram of the digital
  satellite **broadcast** receiver. (5) Interface circuit; (16) **Decoder** ;
  (17) Display circuit; (20) Karaoke cartridge; (21) Cartridge interface
  circuit; (22) MPEG2; (24) Output terminal; (25) Aural output terminal;
  (SW1) Switching device.
     Dwg.1/1
Title Terms: DIGITAL; SATELLITE; **BROADCAST** ; RECEIVE; KARAOKE; FUNCTION;
  SMALL-SCALE; SALOON; SWITCH; DEVICE; DEVIATE; **AUDIO** ; SIGNAL; **DECODE** ;
  ANALOGUE; **AUDIO** ; SIGNAL; SELECT; SUPPLY; SIGNAL; AURAL; OUTPUT;
  TERMINAL
Derwent Class: P86; W03
International Patent Class (Main): G10K-015/04
International Patent Class (Additional): **H04N-005/44** ; **H04N-005/445** ;
  H04N-007/08 ; **H04N-007/081**
File Segment: EPI; EngPI

011214336   **Image available**
WPI Acc No: 1997-192261/199717

**Spatial light modulator for imaging applications - has array of mirror
elements loading** data **for addressing of mirror elements with shift
registers receiving one row of** data at time **and latches holding** data
on bit-lines which run down columns of array
Patent Assignee: TEXAS INSTR INC (TEXI   )
Inventor: BHUVA R L; CONNER J L; OVERLAUER M J; TOWNSON W R
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5612713	A	19970318	US 95369247	A	19950106	199717	B

Priority Applications (No Type Date): US 95369247 A 19950106
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5612713	A		7	H04N-003/02	

Abstract (Basic): US 5612713 A
        The light modulator includes an array of pixel- **generating**
    elements, with each individually addressable with **data** and an
    associated **memory** cell array **storing** the **data** . At least one
    bit-line is associated with each column of **memory** cells for delivery
    of **data** to that column. A row of shift registers receives row **data**
    for one row of the array from an external source for delivery to the
    memory cells. A row of latches receives the row **data** from the shift
    registers and holds it on the bit-lines.
        A block load circuit is interposed between the latches and the
    memory cells and sequences delivery of the row **data** to a selected
    row of the **memory** cells by delivering a write signal to different
    blocks of the selected **memory** cell row. Each block receives the write
    signal at a **different** **time** . A row **decoder** delivers a row select
    signal to the block load circuit for selection of a **memory** cell row.
        USE/ADVANTAGE - E.g. display and printing applications. High speed
    and efficient loading for increased **data** bandwidths. Sequencing
    loading in **time** prevents high current transients and increases noise
    immunity. Power bus can be narrower and reduced die layout area
    required.
        Dwg.2/3
Title Terms: SPACE; LIGHT; MODULATE; IMAGE; **APPLY** ; ARRAY; MIRROR; ELEMENT
    ; LOAD; **DATA** ; ADDRESS; MIRROR; ELEMENT; SHIFT; REGISTER; RECEIVE; ONE;
    ROW; **DATA** ; **TIME** ; LATCH; HOLD; **DATA** ; BIT; LINE; RUN; DOWN; COLUMN;
    ARRAY
Index Terms/Additional Words: **DMD_S LMSp atia l li ght** ; SLM
Derwent Class: W04
International Patent Class (Main): **H04N-003/02**
File Segment: EPI

 21/5/15   (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010552198   **Image available**
WPI Acc No: 1996-049151/199605
Related WPI Acc No: 1997-099683
XRPX Acc No: N96-041248
 **Channel selection appts with fast forward, reverse and channel pause
    functions -** transmits **group of programs with same program source
    material and staggered starting times, and sets pointer to program within
    group to be** decoded **and displayed, according to special function
    selected by user**
Patent Assignee: BELL ATLANTIC NETWORK SERVICES (BELL-N)
Inventor: LEW E L; O'CALLAGHAN D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5477263	A	19951219	US 94249572	A	19940526	199605	B

Priority Applications (No Type Date): US 94249572 A 19940526
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 5477263   A   16 H04N-007/173
Abstract (Basic): US 5477263 A
   The appts includes a **memory** , containing a **data** structure with
information identifying how to access each program of at least one
group of programs of a number of programs. The group comprises the same
program source material with staggered starting times offset by. .
respective numbers of **time** delay increments from a first program of
the group. The **memory** also contains a pointer to the program of the
group which should be **decoded** for presentation to the user.
   A user control apparatus indicates program selection information
and activates special functions. The pointer is changed to point to a
program with a **different** starting **time** , in response to an
indication from the user control apparatus, that the user requires a
special function. The special function may be fast forward, reverse and
pause.
   USE/ADVANTAGE - E.g. in MPEG-2 **video** -on- **demand** system, CATV.
Provides fast user channel change capability for compressed digital
data input **stream** . Enables reception of **encrypted** programming from
multichannel **stream** without delay. Provides VCR-like functionality.
   Dwg.8/9
Title Terms: CHANNEL; SELECT; APPARATUS; FAST; FORWARD; REVERSE; CHANNEL;
 PAUSE; FUNCTION; **TRANSMIT** ; GROUP; PROGRAM; PROGRAM; SOURCE; MATERIAL;
 STAGGER; START; **TIME** ; SET; POINT; PROGRAM; GROUP; **DECODE** ; DISPLAY;
 ACCORD; SPECIAL; FUNCTION; SELECT; USER
Derwent Class: W02
International Patent Class (Main): **H04N-007/173**
File Segment: EPI

 21/5/16 **(Item 8 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
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010410571 **Image available**
WPI Acc No: 1995-311885/199541
Related WPI Acc No: 1995-256344
XRPX Acc No: N95-235653
 Magnetic disk data **storage device with spiral tracks - has spiral**
 patterns on opposite surfaces of disk spiralling in opposite directions
 and reads one surface as actuator sweeps in and other surface as actuator
 sweeps out
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)
Inventor: BROWN D H; CUNNINGHAM E A; GREENBERG R; OTTESEN H H; SMITH G J;
 VANLEEUWEN G W; BILLINGS R A; CUNNINGHAM B A; VAN LEEUWEN G W
Number of Countries: 010 Number of Patents: 014
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
CA 2138301	A	19950722	CA 2138301	A	19941215	199541	B
EP 701246	A2	19960313	EP 95480084	A	19950713	199615	
JP 8063898	A	19960308	JP 95127677	A	19950526	199620	
TW 270193	A	19960211	TW 94111744	A	19941215	199621	
BR 9503412	A	19960521	BR 953412	A	19950724	199626	
EP 701246	A3	19960605	EP 95480084	A	19950713	199632	
US 5594924	A	19970114	US 94184417	A	19940121	199709	
			US 94288525	A	19940810		
			US 95443838	A	19950518		
US 5619387	A	19970408	US 94184417	A	19940121	199720	
			US 94288525	A	19940810		
			US 95444175	A	19950518		
			US 96689582	A	19960812		
US 5630104	A	19970513	US 94184417	A	19940121	199725	
			US 94288525	A	19940810		
			US 95444116	A	19950518		

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CN 1128386     A   19960807  CN 95104772    A   19950425  199750
CA 2138301     C   19981215  CA 2138301     A   19941215  199909
KR 218611      B1  19990901  KR 9524501     A   19950809  200104
JP 2002140864  A   20020517  JP 95127677    A   19950526  200237
                             JP 2001215689  A   19950526
CN 1359070     A   20020717  CN 95104772    A   19950425  200268
                             CN 2001124475  A   19950425
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Priority Applications (No Type Date): US 94288525 A 19940810; US 94184417 A
    19940121; US 95443838 A 19950518; US 95444175 A 19950518; US 96689582 A
    19960812; US 95444116 A 19950518
Cited Patents: No-SR.Pub; 1.Jnl.Ref; CA 2138301; EP 664506; JP 1130375; JP
    4102267; JP 62180540; JP 63268160; US 4107746; US 4636885; WO 9214249
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 2138301	A		54	G11B-007/09	
EP 701246	A2	E	24	G11B-005/012	
Designated States (Regional): DE FR GB					
JP 8063898	A		22	G11B-020/12	
TW 270193	A			G06K-001/00	
BR 9503412	A			G11B-019/20	
EP 701246	A3			G11B-007/09	
US 5594924	A		21	G06F-009/312	CIP of application US 94184417
					Div ex application US 94288525
US 5619387	A		21	G11B-005/55	CIP of application US 94184417
					Div ex application US 94288525
					Cont of application US 95444175
US 5630104	A		21	G06F-017/00	CIP of application US 94184417
					Div ex application US 94288525
CN 1128386	A			G11B-005/00	
CA 2138301	C			G11B-020/12	
KR 218611	B1			G11B-007/26	
JP 2002140864	A		21	G11B-020/10	Div ex application JP 95127677
CN 1359070	A			G06F-012/06	Div ex application CN 95104772

Abstract (Basic): CA 2138301 A
    The device comprises a first and a second magnetic recording
surface located on a disk rotatably mounted on a spindle, and having an
inner and an outer edge. A spindle motor rotates the disk in the
predetermined direction. The first recording surface is formatted to
contain a spiral **data** track spiralling inward from the outer edge.
The second recording surface is formatted to contain a **data** track
spiralling outward from the inner edge toward the outer edge of the
disk.
    A first and a second transducer is mounted on a movable actuator on
each side of the disk for accessing **data** by following the spiral
tracks. The patterns of the tracks on the two surfaces spiral in
opposite direction. The **data** **stored** on the disk is pref.
multimedia **data** which does not require a very low error rate.
    USE/ADVANTAGE - Esp. storage of **multimedia** **data** , e.g. in **video**
-on- **demand** applications. Provides more efficient storage of large
amount of **multimedia** **data** at reduced cost and at more suitable
access speed.
    Dwg.3a/9
Title Terms: MAGNETIC; DISC; **DATA** ; STORAGE; DEVICE; SPIRAL; TRACK; SPIRAL
    ; PATTERN; OPPOSED; SURFACE; DISC; SPIRAL; OPPOSED; DIRECTION; READ; ONE;
    SURFACE; ACTUATE; SWEEP; SURFACE; ACTUATE; SWEEP
Derwent Class: T03; W04
International Patent Class (Main): **G06F-009/312** ; **G06F-012/06** ;
    G06F-017/00 ; G06K-001/00; **G11B-005/00** ; **G11B-005/012** ; **G11B-005/55** ;
    G11B-007/09 ; **G11B-007/26** ; **G11B-019/20** ; **G11B-020/10** ; **G11B-020/12**
International Patent Class (Additional): **G06F-003/06** ; **G06F-009/455** ;
    G06F-015/00 ; **G11B-005/09** ; **G11B-005/39** ; **G11B-005/596** ; **G11B-007/00**
    ; **G11B-021/10** ; **H04N-005/781**
File Segment: EPI

008270658   **Image available**
WPI Acc No: 1990-157659/199021
XRPX Acc No: N90-122541
   High definition time multiplexed analog components TV system -
   filtering luminance components to produce interlaced luminance components
   fields having lines which is half original number of lines
Patent Assignee: PHILIPS GLOEILAMPENFAB NV (PHIG)
Inventor: CAVALLERAN A P
Number of Countries: 006 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 369523	A	19900523	EP 89202819	A	19891108	199021	B
CA 2002818	A	19900514				199029	
JP 2192377	A	19900730				199036	
US 4992853	A	19910212	US 88271136	A	19881114	199109	

Priority Applications (No Type Date): US 88271136 A 19881114
Cited Patents: 1.Jnl.Ref; A3...9129; NoSR.Pub; WO 8901273
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 369523	A				

   Designated States (Regional): DE FR GB

Abstract (Basic): EP 369523 A
     The encoding method comprises the steps of filtering luminance
components to produce interlaced luminance component fields having a
second number of lines which is one half times the given number of
lines. The luminance components are subtracted to produce)interlaced
line subtraction component fields having the second number of lines.
Lines of the interlaced luminance component fields and the interlaced
line subtraction component fields are processed in groups each group
containing information from a multiplicity of lines, to generate a
number of signal packets. The signal packets comprises a first filtered
liminance component having a first time compression ratio and a
second filtered luminance component having a second time compression
ratio.
     The second time compression ratio is different from the first
time compression ratio and a number of line subtraction components are
separate from first and second filtered luminance components. A time
multiplexed line signal having a second line period greater than the
first line period is generated by time multiplexing the signal
packets in time slots. (14pp Dwg.No.9/10)
Title Terms: HIGH; DEFINE; TIME ; MULTIPLEX; ANALOGUE; COMPONENT;
   TELEVISION; SYSTEM; FILTER; LUMINOUS; COMPONENT; PRODUCE; INTERLACED;
   LUMINOUS; COMPONENT; FIELD; LINE; HALF; ORIGINAL; NUMBER; LINE
Derwent Class: W02
International Patent Class (Additional): H04N-007/00 ; H04N-011/00
File Segment: EPI

 21/5/18   (Item 10 from file: 350)

007311159
WPI Acc No: 1987-308166/198744
XRPX Acc No: N87-230544
   High-speed multi-execution unit uniprocessor system - has special purpose
   tag fields associated with general purpose registers to maintain records
   of use of registers by units execution
Patent Assignee: INT BUSINESS MACHINES CORP (IBMC); IBM CORP (IBMC)
Inventor: POMERENE J H; PUZAK T R; RECHTSCHAFFEN R N; SPARACIO F J;
   RECHTSCHAF R N
Number of Countries: 004 Number of Patents: 004

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 243892	A	19871104	EP 87105990	A	19870424	198744	B
US 4903196	A	19900220	US 86859156	A	19860502	199014	
EP 243892	B1	19940803	EP 87105990	A	19870424	199430	
DE 3750306	G	19940908	DE 3750306	A	19870424	199435	
			EP 87105990	A	19870424		

Priority Applications (No Type Date): US 86859156 A 19860502
Cited Patents: 2.Jnl.Ref; A3...9018; FR 2399693; No-SR.Pub; US 3346851; US
   3718912; US 4574349
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 243892	A	E	27		

   Designated States (Regional): DE FR GB

US 4903196	A		23		
EP 243892	B1	E	110	G06F-009/38	

   Designated States (Regional): DE FR GB

| DE 3750306 | G | | | G06F-009/38 | Based on patent EP 243892 |

Abstract (Basic): EP 243892 A
     The uniprocessor system has N execution units to each of which each
general purpose register (GPR) is accessible. A control mechanism of
the system allows the N execution units to execute **concurrently** up to
N instructions using the some general purpose registers sequentially or
 different general purpose registers **concurrently** . The four special
purpose tab fields associated with each general purpose register are a
SINK FORWARD TAG, a SINK EXECUTE TAG, and one or more SOURCE TAG-SOURCE
COUNTER pair. An instruction register **store** associated with each
execution unit has fields **storing** the instruction for execution and
two or more special purpose fields **storing** an identification TAG
unique to the execution unit and a SINK v SOURCE TAG.
     The special purpose tag fields are loaded by a control mechanism in
the execution units and general purpose registers during an instruction
 decoding phase of system operation. The chronological sequence of
requests for use by any execution unit of a particular general purpose
register in the SINK FORWARD TAG field is **stored** . The first execution
unit is identified which must use the general purpose register as a
immediately preceding use by a second execution unit in the units SINK
v SOURCE TAG field. As the units execute their assigned tasks their
chronological sequence of use of the general purpose register in the
SINK EXECUTE TAG field is maintained.
     ADVANTAGE - Logical integrity of **data** , used out of sequence
relative to instructions **stream** , is ensured.
     2/9
Title Terms: HIGH; SPEED; MULTI; EXECUTE; UNIT; SYSTEM; SPECIAL; PURPOSE;
  TAG; FIELD; ASSOCIATE; GENERAL; PURPOSE; REGISTER; MAINTAIN; RECORD;
  REGISTER; UNIT; EXECUTE
Derwent Class: T01
International Patent Class (Main): **G06F-009/38**
International Patent Class (Additional): **G06F-015/00**
File Segment: EPI

 21/5/19   (Item 11 from file: 350)

003728141
WPI Acc No: 1983-724337/198331
XRPX Acc No: N83-133234
     Data **processing appts. for pre-fetching instructions - predicts result
  of conditional branch instruction based on previous performance rather
  than instruction field**
Patent Assignee: IBM CORP (IBMC)
Inventor: LOSQ J J; RAO G S; SACHAR H E
Number of Countries: 010 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 84114	A	19830727	EP 82111309	A	19821207	198331	B
ES 8403221	A	19840601				198429	
US 4477872	A	19841016	US 82339561	A	19820115	198444	
EP 84114	B	19860507				198619	
DE 3271063	G	19860612				198625	

Priority Applications (No Type Date): US 82339561 A 19820115
Cited Patents: 1.Jnl.Ref
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 84114	A	E	25		

   Designated States (Regional): BE CH DE FR GB IT LI NL

EP 84114	B	E			

   Designated States (Regional): BE CH DE FR GB IT LI NL

Abstract (Basic): EP 84114 A
    The predictor mechanism is based on a history table, updated in accordance with whether previous execution of a given conditional branch instruction resulted in the branch being taken. When a conditional branch instruction is **decoded** , its address, **stored** in an address register accesses the history table, where the **stored** history determines the derivation of the address of the next instruction to be profetched, if a compare circuit indicates a match, default criteria being used otherwise.
    Preferably, if comparison is successful, logic provides the associated history bit from the table to an instruction fetch mechanism as an indication of whether the conditional branch instruction is predicted to be taken

Title Terms: **DATA** ; PROCESS; APPARATUS; PRE; FETCH; INSTRUCTION; PREDICT; RESULT; CONDITION; BRANCH; INSTRUCTION; BASED; PERFORMANCE; INSTRUCTION; FIELD
Derwent Class: T01
International Patent Class (Additional): **G06F-009/38**
File Segment: EPI

```
Set       Items    Description
S1       602315    CLIENT? OR VIEWER? OR USER? OR STANDALONE OR STAND()ALONE -
                   OR PC OR PCS OR PERSONAL()COMPUTER? OR WORKSTATION? OR WORK()-
                   STATION? OR NODE?
S2       915359    REQUEST? OR ASK OR ASKS OR ASKED OR ASKING OR PETITION? OR
                   CALL()(ON OR UPON) OR QUER? OR QUESTION? OR INQUIR? OR DEMAND?
                   OR REQUISITION OR APPLY OR APPLYING
S3      1999152    CAPTUR? OR MEMORY OR CACHE? OR STORE? ? OR STORING OR SAVE
                   OR SAVING OR KEEP? ? OR KEEPING
S4       600112    (TV OR TELEVISION OR RADIO)()(SHOW? OR PROGRAM? OR BROADCA-
                   ST?) OR MEDIA()ASSET? OR VIDEO? OR AUDIO? OR MULTIMEDIA OR ME-
                   DIA
S5      3111402    TIME OR SCHEDULE? OR PERIOD OR DURATION OR SIMULTANEOUS? OR
                   CONCURRENT?
S6       286682    ENCOD??? OR DECOD??? OR ENCRYPT??? OR CIPHER? OR CYPHER? OR
                   DECRYPT? OR CYPHERTEXT OR ENCYPHER? OR UNCOD? OR UNENCRYPT? -
                   OR ENCIPHER? OR UNCOD? OR DECIHER? OR UNCYPHER? OR UNCYPHER? -
                   OR CYPTO?
S7       626997    PUBLISH? OR ISSUE OR DISPURS? OR DISTRIBUT?
S8      1991003    DIFFERENT OR ANOTHER OR SEPARATE OR TARGET
S9      4524626    TRANSFER? OR STREAM? OR SEND? OR TRANSMIT? OR TRANSMISSION
                   OR GENERAT? OR PLAY? OR BROADCAST?
S10         295    S1 AND S2 AND S3 AND (S4 (3N) S5)
S11     4896886    S7 OR S9
S12       36068    S8 (3N) S5
S13       15831    S11 AND S12
S14           4    S10 AND S13
S15         760    S2 AND S3 AND (S4 (3N) S5)
S16         956    S13 AND S6
S17           0    S15 AND S16
S18         103    S15 AND S6
S19          83    S18 AND S11
S20           0    S19 AND S12
S21           0    S18 AND S12
S22       15024    S9 AND S12
S23           0    S19 AND S22
S24          12    S15 AND S22
S25          12    S14 OR S24
S26          11    S25 AND IC=(G06F? OR H04N? OR G11B?)
File 347:JAPIO Oct 1976-2003/Jan(Updated 030506)
        (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200334
        (c) 2003  Thomson Derwent
```

05632845   **Image available**
VIDEO DATA MANAGEMENT DEVICE FOR VIDEO SERVER

PUB. NO.:   09-247645 [JP 9247645 A]
PUBLISHED: September 19, 1997 (19970919)
INVENTOR(s):   YAMAGUCHI HIDEAKI
                HORIUCHI CHIHIRO
APPLICANT(s):   TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP
                (Japan)
APPL. NO.:   08-054721 [JP 9654721]
FILED: March 12, 1996 (19960312)
INTL CLASS: [6] H04N-007/16 ; G06F-003/06 ; H04N-005/78 ; H04N-005/93

JAPIO CLASS: 44.6 (COMMUNICATION -- Television); 42.5 (ELECTRONICS --
                Equipment); 45.3 (INFORMATION PROCESSING -- Input Output
                Units)
JAPIO KEYWORD: R138 (APPLIED ELECTRONICS -- Vertical Magnetic &
                Photomagnetic Recording)

ABSTRACT
PROBLEM TO BE SOLVED: To reduce the cost per unit capacity of a storage
medium by selectively utilizing a storage medium with a **different** mean
seek **time** depending on the frequency of use of video data.

SOLUTION: A video server **stores** lots of video data and distributes the
video data in response to a distribution **request** . A communication IF1 is
connected to a network such as a LAN and **sends** /receives the video data
with a distribution **request** party. Upon the receipt of a distribution
request relating to the video data with a file name from the distribution
request party via the communication IF1, a CPU 2 executes prescribed
processing. Furthermore, the server is provided with a header table
management means 4 and a storage data management means 5 **storing** and
managing the video data into program- search header data and the video data
main body separately, and the storage data management means 5 uses plural
kinds of storage **media** whose mean seek **time** differs and properly
selects any of the storage **media** whose mean seek **time** differs depending
on the frequency of ruse of the video data to **store** the video data.

04258250   **Image available**
PICTURE INPUT-OUTPUT DEVICE

PUB. NO.:   05-249950 [JP 5249950 A]
PUBLISHED: September 28, 1993 (19930928)
INVENTOR(s):   YANAI NORIBUMI
                FUJITA MAKOTO
                KATSURA AKIHIRO
                FUKUNAGA YASUSHI
APPLICANT(s):   HITACHI LTD [000510] (A Japanese Company or Corporation), JP
                (Japan)
APPL. NO.:   04-045775 [JP 9245775]
FILED: March 03, 1992 (19920303)
INTL CLASS: [5] G09G-005/36; **G06F-003/153** ; G09G-005/00; **H04N-007/15**
JAPIO CLASS: 44.9 (COMMUNICATION -- Other); 44.6 (COMMUNICATION --
                Television); 45.3 (INFORMATION PROCESSING -- Input Output
                Units)
JOURNAL: Section: P, Section No. 1671, Vol. 18, No. 11, Pg. 36,
                January 10, 1994 (19940110)

ABSTRACT

PURPOSE: To input and output **different** **video** signals **simultaneously** to and from one frame **memory** by performing input-output to and from the frame **memory** of second data when a **transfer** period is assigned to a buffer.

CONSTITUTION: A frame **memory** 30 **stores** first and second data included in first and second video signals, and a buffer 80 **stores** the second data being input and output. A time indicating means 10 outputs a blanking period or an effective **period** of the first **video** signal as a timing signal. A time division control means 20, receiving a **request** for the assignment of **transfer** periods for inputting and outputting between the frame **memory** 30 and the buffer 80 for the second data outputs from the buffer 80, outputs a **transfer** permission to the buffer 80 in order to assign one side period out of informed periods by the time indicating means 10. The buffer 80 submits the **request** for the assignment of the **transfer** periods to the time division control means 20, and performs the input and output to and from the frame **memory** 3 of the second data, when the **transfer** periods are assigned.

26/5/3   (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014880355   **Image available**
WPI Acc No: 2002-701061/200276
XRPX Acc No: N02-552691
  Video recording-reproduction system has controller which performs reading and writing operations with respect to pair of memories based on video recording-reproduction request **from central processing unit**
Patent Assignee: NEC CORP (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week		
JP 2002209170	A	20020726	JP 2001200	A	20010104	200276	B	

Priority Applications (No Type Date): JP 2001200 A 20010104
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2002209170	A		6	H04N-005/765	

Abstract (Basic): JP 2002209170 A
      NOVELTY – A **memory** **stores** video recording **stream** data and another **memory** **stores** index information including title of a program, **video** recording **time** , amount of data etc., and related data of the program. A controller (14) performs reading and writing operations with respect to both the memories based on video recording-reproduction **request** from a central processing unit (12).
      DETAILED DESCRIPTION – An INDEPENDENT CLAIM is included for video recording-reproduction method.
      USE – Video recording-reproduction system.
      ADVANTAGE – Since index information is **stored** in a **separate** **memory** the **time** required to search the index information is reduced. The **generation** of error in the reproduced data is suppressed.
      DESCRIPTION OF DRAWING(S) – The figure shows the block diagram of video recording-reproduction system. (Drawing includes non-English language text).
      Central processing unit (12)
      Controller (14)
      pp; 6 DwgNo 1/6
Title Terms: VIDEO; RECORD; REPRODUCE; SYSTEM; CONTROL; PERFORMANCE; READ; WRITING; OPERATE; RESPECT; PAIR; **MEMORY** ; BASED; VIDEO; RECORD; REPRODUCE; **REQUEST** ; CENTRAL; PROCESS; UNIT
Derwent Class: T03; W04
International Patent Class (Main): **H04N-005/765**
International Patent Class (Additional): **G11B-020/12 ; G11B-027/00 ;**

26/5/4   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014436191   **Image available**
WPI Acc No: 2002-256894/200230
XRPX Acc No: N02-198874
  Video cassette recorder sends   request **for recording video signals
  selected by subscriber, to central computer which instructs receiving
  unit to record** requested **video signals**
Patent Assignee: LANGBERG M (LANG-I)
Inventor: LANGBERG M
Number of Countries: 096 Number of Patents: 003
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200195621   A1   20011213   WO 2001SE1314   A   20010608   200230   B
SE 200002163   A   20011209   SE 20002163   A   20000608   200230
AU 200174724   A   20011217   AU 200174724   A   20010608   200230

Priority Applications (No Type Date): SE 20002163 A 20000608
Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
WO 200195621 A1 E   24 H04N-005/761
    Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
    CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
    IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
    PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
SE 200002163 A   H04N-005/761
AU 200174724 A   H04N-005/761   Based on patent WO 200195621

Abstract (Basic): WO 200195621 A1
      NOVELTY - A network card connects VCR (1) to a global network. The
    VCR **sends** a **request** for recording subscriber selected video
    signals, to a central computer (6) which instructs a receiving unit (5)
    to record the **requested** video signals. The central computer instructs
    a local server (3) to receive recorded video signals from the receiving
    unit. The recorded video signals are **transmitted** from the local
    server to a television set.
      DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for
    video signals recording and **playing** method.
      USE - For recording and **playing** video signals such as TV
    programs, movies.
      ADVANTAGE - By **storing** recorded video signals on a local server,
    the storage capacity becomes practically unlimited. It is possible to
    order a recording of several TV programs which are **broadcast** at the
    same **time** in **different** channels and to both record and **play** video
    signals at the same **time** . The **video** signals can be **transferred** to
    the VCR in a real time through the local network and high quality of
    the **play** can be guaranteed.
      DESCRIPTION OF DRAWING(S) - The figure shows the system for
    recording and **playing** video signals.
      VCR (1)
      Local server (3)
      Receiving unit (5)
      Central computer (6)
      pp; 24 DwgNo 1/4
Title Terms: VIDEO; CASSETTE; RECORD; **SEND** ; **REQUEST** ; RECORD; VIDEO;
  SIGNAL; SELECT; SUBSCRIBER; CENTRAL; COMPUTER; RECEIVE; UNIT; RECORD;
  REQUEST ; VIDEO; SIGNAL
Derwent Class: W04
International Patent Class (Main): **H04N-005/761**

26/5/5   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014419346   **Image available**
WPI Acc No: 2002-240049/200229
XRPX Acc No: N02-185214
    Streaming **a single media track to multiple** clients **e.g. for computer
    systems, in which a track of media has associated metadata that provides
    timing, offset and other information**
Patent Assignee: SUN MICROSYSTEMS .INC (SUNM); BRITTENSON J (BRIT-I); .
    NARASIMHAN A (NARA-I); PROCTOR S (PROC-I); SERGENT J S (SERG-I); SHAFER M
    (SHAF-I); SRIKANTAN G (SRIK-I)
Inventor: BRITTENSON J; NARASIMHAN A; PROCTOR S; SERGENT J; SHAFER M;
    SRIKANTAN G; SERGENT J S
Number of Countries: 095 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200177870	A2	20011018	WO 2001US11137	A	20010406	200229	B
AU 200151353	A	20011023	AU 200151353	A	20010406	200229	
US 20020056126	A1	20020509	US 2000195755	P	20000408	200235	
			US 2001827866	A	20010406		
EP 1273152	A2	20030108	EP 2001924725	A	20010406	200311	
			WO 2001US11137	A	20010406		

Priority Applications (No Type Date): US 2000195755 P 20000408; US
    2001827866 A 20010406
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 200177870 A2 E 28 G06F-017/00
    Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
    CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
    KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT
    RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
    Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
    IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200151353 A   G06F-017/00   Based on patent WO 200177870
US 20020056126 A1   H04N-007/173   Provisional application US 2000195755

EP 1273152   A2 E   H04L-029/06   Based on patent WO 200177870
    Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
    LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic): WO 200177870 A2
        NOVELTY - Method for **streaming** a media track to multiple **clients**
    using a single copy of the track's metadata, rather than making
    separate copies of the metadata for each **stream** . A media track's
    metadata includes information used to identify and locate **media**
    corresponding to **different** **time** positions in the track or media
    program. Sharing one copy of the metadata among multiple **client**
    streams promotes more efficient use of a media **streaming** server's
    resources. When a media track .is first **requested** , a track object .is
    generated to **store** and allow access to the metadata. For each
    client **stream** , a separate track handle object is created to manage
    access to the metadata for the **stream** 's specific context. The
    streamed media track may be pant of a live media event or may be part
    of a pre-recorded media· program.
        DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
    following: method using a single set of media metadata; computer
    readable storage medium; apparatus for **streaming** media
        USE - For computer systems.
        ADVANTAGE - Provides **streaming** of a media track to multiple
    clients with just one copy of the track metadata. Hence, this promotes
    more efficient use of a media **streaming** server's resources
        DESCRIPTION OF DRAWING(S) - The diagram shows the use of a single

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              copy media track metadata to  stream  the media to multiple  clients
                  file track (212,214)
                  audio track (202)
                  video track (204)
                  pp; 28 DwgNo 2/6
Title Terms:  STREAM ; SINGLE; MEDIUM; TRACK; MULTIPLE;  CLIENT ; COMPUTER;
   SYSTEM; TRACK; MEDIUM; ASSOCIATE; TIME; OFFSET; INFORMATION
Derwent Class: T01
International Patent Class (Main):  G06F-017/00 ; H04L-029/06;
   H04N-007/173
International Patent Class (Additional):  H04N-007/24
File Segment: EPI
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 26/5/6      (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014141680     **Image available**
WPI Acc No: 2001-625891/200172
Related WPI Acc No: 2001-663307
XRPX Acc No: N01-466569
   Computer implemented method for displaying interactive media  content
   displaying  simultaneously  real  time  media  presentation and web page
   on different portions of display
Patent Assignee: YAHOO! (YAHO-N); YAHOO INC (YAHO-N)
Inventor: BURRIS D; BUSHMAN B; JACOBY R; LINOWES S; MADISON J; SOHN H H;
   SPEAKS J J; SRINIVASAN A; BUSCHMANN B
Number of Countries: 094  Number of Patents: 003
Patent Family:
Patent No      Kind  Date      Applicat No    Kind   Date        Week
WO 200167223   A1    20010913  WO 2001US7388   A     20010307    200172   B
AU 200149112   A     20010917  AU 200149112    A     20010307    200204
US 20020091762 A1    20020711  US 2000187683   P     20000307    200248
                               US 2000198713   P     20000420
                               US 2001801439   A     20010307


Priority Applications (No Type Date): US 2000198713 P 20000420; US
   2000187683 P 20000307; US 2001801439 A 20010307
Patent Details:
Patent No  Kind Lan Pg   Main IPC     Filing Notes
WO 200167223  A1 E   47 G06F-003/00
   Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
   CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
   KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT
   RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200149112  A         G06F-003/00   Based on patent WO 200167223
US 20020091762 A1        G06F-015/16   Provisional application US 2000187683

                                       Provisional application US 2000198713

Abstract (Basic): WO 200167223 A1
        NOVELTY - The method involves receiving a data  stream  from a
   first server system over a network connection. The data  stream
   includes a first data portion corresponding to a real  time   media
   presentation and a second data portion identifying data for a related
   web page  stored  on a second server system. The first data portion is
   processed to produce the real  time   media  presentation. The web page
   data is automatically retrieved from the second server system.
        DETAILED DESCRIPTION - The method further involves  sending  a
   request  to the first server system identifying the data  stream  in
   response to a  user  selection of the real  time   media  presentation
        The real  time   media  presentation and the web page are
   simultaneously  displayed on  different  portions of a display.
        INDEPENDENT CLAIMS are included for an information display system
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and for a computer-readable medium.
          USE - For displaying **media** content, especially real- **time   media**
     content with **simultaneous** interactive display of related text and
     reference information.
          ADVANTAGE - Allows **user** to view **simultaneously** real- **time**
     media content and online information that is related or unrelated to
     the media content.
          DESCRIPTION OF DRAWING(S) - The figure shows an information
     retrieval and communication network for communicating media content.
          pp; 47 DwgNo 2/6
Title Terms: COMPUTER; IMPLEMENT; METHOD; DISPLAY; INTERACT; MEDIUM;
  CONTENT; DISPLAY; SIMULTANEOUS; REAL; TIME; MEDIUM; PRESENT; WEB; PAGE;
  PORTION; DISPLAY
Derwent Class: T01
International Patent Class (Main): **G06F-003/00 ; G06F-015/16**
International Patent Class (Additional): **G06F-013/00**
File Segment: EPI

  26/5/7   (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

013531402   **Image available**
WPI Acc No: 2001-015608/200102
XRPX Acc No: N01-011886
  Multimedia data retrieving system e.g. multimedia **server has** scheduler
    to determine group of streams **for which block is to be read in next**
    sweep of the reader
Patent Assignee: KONINK PHILIPS ELECTRONICS NV (PHIG)
Inventor: COUMANS P F A; KORST J H M
Number of Countries: 022 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200057635	A1	20000928	WO 2000EP1888	A	20000306	200102	B
EP 1080577	A1	20010307	EP 2000909311	A	20000306	200114	
			WO 2000EP1888	A	20000306		
KR 2001043758	A	20010525	KR 2000713124	A	20001122	200168	
US 6477541	B1	20021105	US 2000531943	A	20000321	200276	
JP 2002540545	W	20021126	JP 2000607406	A	20000306	200307	
			WO 2000EP1888	A	20000306		

Priority Applications (No Type Date): EP 99200897 A 19990323
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200057635	A1	E	25	H04N-005/00	

     Designated States (National): JP KR
     Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU
     MC NL PT SE

| EP 1080577 | A1 | E | | H04N-005/00 | Based on patent WO 200057635 |

     Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI
     LU MC NL PT SE

KR 2001043758	A			H04N-005/00	
US 6477541	B1			G06F-017/30	
JP 2002540545	W		34	G11B-020/10	Based on patent WO 200057635

Abstract (Basic): WO 200057635 A1
          NOVELTY - Data blocks retrieved as maximum and minimum bit rate
     streams from a storage medium (110) are supplied to **users** . A reader
     (180) sweep reads the data blocks and **stores** it in **different**
     buffers. A **scheduler** (170) determines group of the **streams** for
     which block is to be read in next sweep of the reader. The scheduler is
     operative to determine to service a low bit rate **stream** less than a
     high bit rate **stream** .
          DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a
     method of retrieving blocks of multimedia data.
          USE - In e.g. multimedia server for near-video-on- **demand** system

and video-on- **demand** system.
ADVANTAGE - By servicing the **stream** of low bit rate less often,
the relative contribution of the switch time becomes smaller and the
disk is being used more efficiently. Reduces **memory** required to
implement the buffers for the **stream** .
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
data retrieving system.
Storage medium (110)
Scheduler (170)
Reader (180)
pp; 25 DwgNo 1/5
Title Terms: DATA; RETRIEVAL; SYSTEM; SERVE; DETERMINE; GROUP; **STREAM** ;
  BLOCK; READ; SWEEP; READ
Derwent Class: T03; W02; W04
International Patent Class (Main): **G06F-017/30** ; **G11B-020/10** ;
  H04N-005/00
International Patent Class (Additional): **G11B-027/00** ; **H04N-005/92** ;
  H04N-005/93
File Segment: EPI

26/5/8   (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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013108031   **Image available**
WPI Acc No: 2000-279902/200024
XRPX Acc No: N00-211245
  Video data communication unit for video network, has transducer to
  convert format of data received through interface to different format
  suitable for video applications ·
Patent Assignee: CANON KK (CANO)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
JP 2000078557 A   20000314· JP 98245947   A   1998083   200024 B

Priority Applications (No Type Date): JP 98245947 A 19980831
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
JP 2000078557 A   14 H04N-007/173

Abstract (Basic): JP 2000078557 A
NOVELTY - The format of data received through interface (106) is
judged, initially. If format is **different** from the real **time** usage
format, then a video data format transducer (105) converts it to a
format suitable for video applications (102-104).
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:
(a) video data communication procedure;
(b) recording medium for ·**storing** data communication program ·
USE - For video network system.
ADVANTAGE - Reduces hardware scale by utilizing small real **time**
video transducer. Since data can be delivered by **broadcast** using
suitable format conversion, the load of server is reduced remarkably.
DESCRIPTION OF DRAWING(S) - The figure shows components of video
data receiver.
Video applications (102-104)
Video data format transducer (105)
Interface (106)
pp; 14 DwgNo 1/16
Title Terms: VIDEO; DATA; COMMUNICATE; UNIT; VIDEO; NETWORK; TRANSDUCER;
  CONVERT; FORMAT; DATA; RECEIVE; THROUGH; INTERFACE; FORMAT; SUIT; VIDEO;
  APPLY
Derwent Class: W02
International Patent Class (Main): **H04N-007/173**
International Patent Class (Additional): **H04N-007/24**

26/5/9   (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010433163   **Image available**
WPI Acc No: 1995-334483/199543
XRPX Acc No: N95-250726
    Video **server** transferring **real-** time   video **signal - has**
  communication controller for storing **and deleting video data from**
  packet through transmission **line and recursive installation which reads**
  copy of video signal recursive packet based on demand **of** user
Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU   )
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 7231321	A	19950829	JP 9422648	A	19940221	199543	B

Priority Applications (No Type Date): JP 9422648 A 19940221
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 7231321	A		11	H04L-012/28	

Abstract (Basic): JP 7231321 A
        The server (VS1) retrieves video data from a data input unit (30)
    which, in turn, is divided in an internal data domain of a
    communication packet. A communication controller (20) **stores** or
    deletes video data from a packet though a high-speed **transmission**.
    line (10).
        According to a **demand** of a **user** , the copy of the recursive
    packet of a video signal is sent out to a local area network (2) that
    is being read out by a recursive installation (50).
        USE/ADVANTAGE - High-speed access and **transfer** . Ensures only
    required video data are produced on selected **target** . Performs **time**
    division of packet sequence which **stores** continuous video data.
    Allows patrolling of each high-speed **transmission** line.
        Dwg.1/15
Title Terms: VIDEO; SERVE; **TRANSFER** ; REAL-TIME; VIDEO; SIGNAL;
  COMMUNICATE; CONTROL; STORAGE; DELETE; VIDEO; DATA; PACKET; THROUGH;
  TRANSMISSION ; LINE; RECURSIVE; INSTALLATION; READ; COPY; VIDEO; SIGNAL;
  RECURSIVE; PACKET; BASED; **DEMAND** ; **USER**
Derwent Class: W01; W02
International Patent Class (Main): H04L-012/28
International Patent Class (Additional): **H04N-007/173**
File Segment: EPI

26/5/10   (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

010121040   **Image available**
WPI Acc No: 1995-022291/199503
XRPX Acc No: N95-017414
  Computer system with synchronised timing for multimedia presentations -
  has storage for multimedia objects with display and clock object with
  current time obtained externally with processor for synchronisation
Patent Assignee: TALIGENT INC (TALI-N)
Inventor: DENMAN M; TOBIAS J C; DENMAN M L
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9427235	A1	19941124	WO 94US260	A	19940106	199503	B
AU 9465321	A	19941212	AU 9465321	A	19940106	199522	
US 5530859	A	19960625	US 9360150	A	19930510	199631	

Priority Applications (No Type Date): US 9360150 A 19930510
Cited Patents: 2.Jnl.Ref; EP 239884
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9427235	A1	E	39	G06F-015/403	
AU 9465321	A			G06F-015/403	Based on patent WO 9427235
US 5530859	A		38	G06F-009/44	

Abstract (Basic): WO 9427235 A
     The computer system comprises a storage (14,16) and a display (38)
with a clock object and an associated current time, resident in the
storage and able to be displayed on the display. Multiple multimedia
objects are resident in the storage and also displayable. A musical
instrument digital interface data object is provided and a processor
(10) for synchronising the multimedia objects.
     The processor initiates the synchronisation through aniconic
operation. The synchronising process is initiate by a single or double
clicking on the clock object. The processor may drop launch the
synchronisation. The granularity of the synchronisation may also be
adjusted. An external arrangement obtains the current time and the time
may be forced to proceed backwards.
     USE/ADVANTAGE - system is able to produce aesthetic presentation by
correctly synchronising events. clock objects can be hidden when their
linkages are defined.
     Dwg.1/37
Title Terms: COMPUTER; SYSTEM; SYNCHRONISATION; TIME; PRESENT; STORAGE;
  OBJECT; DISPLAY; CLOCK; OBJECT; CURRENT; TIME; OBTAIN; EXTERNAL;
  PROCESSOR; SYNCHRONISATION
Derwent Class: T01; W04
International Patent Class (Main): **G06F-009/44 ; G06F-015/403**
File Segment: EPI

26/5/11   (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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008808939   **Image available**
WPI Acc No: 1991-312952/199143
Related WPI Acc No: 1989-292720; 1990-209981; 1991-193467; 1991-193468;
  1991-193469; 1991-238519; 1991-267399; 1991-280947; 1991-310770;
  1991-310771; 1992-217330; 1992-217349; 1992-349503; 1992-349516;
  1993-264945; 1994-007879; 1994-007881; 1994-117916; 1994-182834
XRPX Acc No: N91-239867
   **Cable TV jammer preventing reception of unauthorised channels - places
   jamming signal near** video **carrier during one** time **slot, and between**
   video **and audio carriers at another**
Patent Assignee: SCIENTIFIC-ATLANTA INC (SCAT); SCIENTIFIC ATLANTA INC
  (SCAT)
Inventor: WEST L E
Number of Countries: 003 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2243275	A	19911023	GB 913236	A	19910215	199143	B
CA 2036348	A	19910822				199145	
US 5287539	A	19940215	US 88166302	A	19880310	199407	
			US 90483451	A	19900221		
GB 2243275	B	19940615				199421	
CA 2036348	C	19960611	CA 2036348	A	19910214	199635	

Priority Applications (No Type Date): US 90483451 A 19900221; US 88166302 A
  19880310
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5287539	A		22	H04K-003/00	CIP of application US 88166302
					CIP of patent US 4912760

GB 2243275   B   H04H-001/02
CA 2036348   C   H04N-007/16

Abstract (Basic): GB 2243275 A
      Off premises cable television interdiction appts. comprises a
microprocessor actuation and controller (300) for actuating and
controlling at least one frequency agile voltage controlled oscillator
(341-344). The voltage controlled oscillator selectively jams only
unauthorised premium programming **transmitted** in the clear from a
headened to a particular subscriber. The voltage controlled oscillator
generates a jamming signal carrier at a frequency 1/N between the
video and audio carriers where N is an integer, pref. small but greater
than one.
      The microprocessor provides a calibration mode and a normal mode
of operation. During the normal mode of operation, a frequency hopping
rate of the order of four thousand hertz is achievable. The method of
interdiction comprises the steps of **generating** and **storing** voltage
control words for operating the oscillator consistent with a headened
selected jamming factor for a partic. channel to be jammed and
addressably **transmitted** and **stored** premium programming
authorisation data.
      ADVANTAGE - In addition to jamming audio carrier, technique
enhances picture jamming by placing jamming signal near **video** carrier
during one **time** slot and between **video** and **audio** carriers at
another **time** slot. This makes would-be pirate's job more difficult.
(44pp Dwg.No.3/7)X
Title Terms: CABLE; TELEVISION; JAMMING; PREVENT; RECEPTION; UNAUTHORISED;
  CHANNEL; PLACE; JAMMING; SIGNAL; VIDEO; CARRY; ONE; TIME; SLOT; VIDEO;
  AUDIO; CARRY
Derwent Class: W02
International Patent Class (Main): H04H-001/02; H04K-003/00; **H04N-007/16**
File Segment: EPI

```
Set      Items    Description
S1       368978   CLIENT? OR VIEWER? OR USER? OR STANDALONE OR STAND()ALONE -
                  OR PC OR PCS OR PERSONAL()COMPUTER? OR WORKSTATION? OR WORK()-
                  STATION? OR NODE?
S2      1620044   REQUEST? OR ASK OR ASKS OR ASKED OR ASKING OR PETITION? OR
                  CALL()(ON OR UPON) OR QUER? OR QUESTION? OR INQUIR? OR DEMAND?
                  OR REQUISITION OR APPLY OR APPLYING
S3       622231   CAPTUR? OR MEMORY OR CACHE? OR STORE? ? OR STORING OR SAVE
                  OR SAVING OR KEEP? ? OR KEEPING
S4       254853   (TV OR TELEVISION OR RADIO)()(SHOW? OR PROGRAM? OR BROADCA-
                  ST?) OR MEDIA()ASSET? OR VIDEO? OR AUDIO? OR MULTIMEDIA OR ME-
                  DIA
S5       985577   TIME OR SCHEDULE? OR PERIOD OR DURATION OR SIMULTANEOUS? OR
                  CONCURRENT?
S6       183948   ENCOD??? OR DECOD??? OR ENCRYPT??? OR CIPHER? OR CYPHER? OR
                  ·DECRYPT? OR CYPHERTEXT OR ENCYPHER? OR UNCOD? OR UNENCRYPT? -
                  OR ENCIPHER? OR UNCOD? OR DECIHER? OR UNCYPHER? OR UNCYPHER? -
                  OR CYPTO?
S7      1601108   PUBLISH? OR ISSUE OR DISPURS? OR DISTRIBUT?
S8      1296099   DIFFERENT OR ANOTHER OR SEPARATE OR TARGET
S9      1125335   TRANSFER? OR STREAM? OR SEND? OR TRANSMIT? OR TRANSMISSION
                  OR GENERAT? OR PLAY? OR BROADCAST?
S10         596   S1 (S) S2 (S) S3 (S) (S4 (3N) S5)
S11     1848047   S7 OR S9
S12       88850   S8 (3N) S5
S13       27929   S11 (S) S12
S14          52   S10 (S) S13
S15          30   S14 (S) S6
S16          25   S15 AND IC=(G06F? OR H04N? OR G11B?)
File 348:EUROPEAN PATENTS 1978-2003/May W04
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030529,UT=20030522
         (c) 2003 WIPO/Univentio
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16/5,K/1   (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01313485
Communication system with multicarrier telephony transport
Kommunikationssystem mit Mehrtragertelefonubertagbarkeit
Systeme de communication de transmission telephonique a porteuses multiples
PATENT ASSIGNEE:
  ADC Telecommunications, Inc., (697353), 12501 Whitewater Drive,
    Minnetonka, MN 55343, (US), (Applicant designated States: all)
INVENTOR:
  Dapper, Mark J., 6558 Baywood Lane, Cincinnati, Ohio 45224, (US)
  Geile, Michael J., 2215 Trappers Knoll, Vatavia, Ohio 45103, (US)
  Hill, Terrance J., 1765 Garret House Lane, Fairfield, Ohio 45014, (US)
  Roberts, Harold A., 7017 Beacon Circle, Eden Prairie, Minnesota 55346,
    (US)
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    (US)
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PATENT (CC, No, Kind, Date):   EP 1122650 A2   010808 (Basic)
                               EP 1122650 A3   020116
APPLICATION (CC, No, Date):   EP 2001201516 970124;
PRIORITY (CC, No, Date): US 10497 960124; US 10506 960124; US 673002 960628
    ; US 650408 960520
DESIGNATED STATES: AT; BE; CH; DE;. DK; ES; FI; FR; GB; GR; IE; IT; LI; .LU;
  MC; NL; PT; SE
RELATED PARENT NUMBER(S) - PN (AN):
  EP 882268 (EP 97903135)
INTERNATIONAL PATENT CLASS: **G06F-017/14** ; H04L-001/00; H04L-001/24;
  H04L-005/02; H04L-005/14; H04L-012/10; H04L-012/12; H04L-012/26;
  H04L-012/28; H04L-012/44; H04L-027/26; H04M-007/00; H04L-027/34;
  H04L-025/03

ABSTRACT EP 1122650 A2
    A communication system includes a hybrid fibre/coax distribution
  network. A head end generates a master clock signal and derives a head

end RF clock signal locked in frequency to the master clock signal. A
head end symbol clock signal is derived, locked in frequency to the
master clock signal, and multiple strings of downstream digital data are
converted to sequences of symbols at times determined by the symbol clock
signal. The symbols are modulated onto multiple orthogonal carriers
having frequencies determined by the RF clock signal. The modulated
orthogonal downstream carriers are transmitted over the distribution
network to remote locations.
ABSTRACT WORD COUNT: 101
NOTE:
  Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 010808 A2 Published application without search report
  Change: 010919 A2 Inventor information changed: 20010801
  Change: 020116 A2 International Patent Classification changed:
                               20011128
  Search Report: 020116 A3 Separate publication of the search report
  Change: 020717 A2 Inventor information changed: 20020524
  Examination: 020918 A2 Date of request for examination: 20020716
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English)   200132   713
      SPEC A   (English)   200132   79700
Total word count - document A   80413
Total word count - document B   0
Total word count - documents A + B   80413

INTERNATIONAL PATENT CLASS: **G06F-017/14** ...

...SPECIFICATION patterns in the payload channels. Data is the payload
  channels can be scrambled with pseudorandom sequences, and **different**
  sequences can be applied to different channels in order to produce a more
  balanced multicarrier spectrum.
    In...employ other modulation and mixing schemes or techniques to shift
  the video signals in frequency, and other **encoding** methods to transmit
  the information in a coded format. Such techniques and schemes for
  transmitting analog video...103 is calculated and a parity bit inserted
  as the tenth bit of the upstream DS0+ for **decoding** and identification
  by the HDT 12 of an error in the upstream data. If an error is...to the
  ISUs 100. The 10th bit or data integrity bit inserted in the downstream
  channels is **decoded** and checked at the ISU and utilized to calculate
  and generate a parity bit for corresponding channels...hand, wants a
  large degree of data integrity. In addition. it may be desirable to allow
  a **user** to select -- and pay for -- whatever degree of error correction
  that he desires. CTSU 54, Figure 3...

...the entry may also specify no correction, in which case message blocks
  do not apply. Step 4413 **encodes** the table entry in an IOC message and
  sends it to the ISU whose address appears in that row of table 4111. A
  general-purpose processor in CXSU 102 of the ISU **stores** the frame
  length in step 4414. As the CXSU receives data from modem 101, Figure 8,
  it **decodes** the frames of an entire message, 4415, then **decodes** the
  check symbols for the message, 4416, and signals an error, 4417, if one
  exists in the message. Steps 4415-4417 repeat for subsequent messages.
  The ISU employs the same process to **send** frames upstream to the head
  end, using the frame length setting specified in step 4414.
    Within both...

  16/5,K/2   (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00746653
MULTI-CAST DIGITAL VIDEO DATA SERVER USING SYNCHRONIZATION GROUPS

SERVER FUR DIGITALE VIDEODATEN FUR EINE VIELZAHL VON ANWENDERN IN
    SYNCHRONGRUPPEN
SERVEUR MULTIDESTINATAIRE DE DONNEES VIDEO NUMERIQUES UTILISANT DES GROUPES
    DE SYNCHRONISATION
PATENT ASSIGNEE:
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PATENT (CC, No, Kind, Date):   EP 764381 A1 970326 (Basic)
                               EP 764381 B1 990506
                               WO 9534169 951214
APPLICATION (CC, No, Date):   EP 95922236 950606;   WO 95US7199 950606
PRIORITY (CC, No, Date): US 255014 940607
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: **H04N-007/173**
NOTE:
  No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):
 Oppn None: 20000426 B1 No opposition filed: 20000208
 Application: 960327 A International application (Art. 158(1))
 Application: 970326 A1 Published application (A1with Search Report
                         ;A2without Search Report)
 Examination: 970326 A1 Date of filing of request for examination:
                         970102
 Examination: 971229 A1 Date of despatch of first examination report:
                         971111
 Change: 980715 A1 Title of invention (German) (change)
 Change: 980715 A1 Title of invention (English) (change)
 Change: 980715 A1 Title of invention (French) (change)
 Grant: 990506 B1 Granted patent
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9918	1710
CLAIMS B	(German)	9918	1608
CLAIMS B	(French)	9918	1955
SPEC B	(English)	9918	8943
Total word count – document A			0
Total word count – document B			14216
Total word count – documents A + B			14216

INTERNATIONAL PATENT CLASS: **H04N-007/173**

...SPECIFICATION In accordance with an aspect of this invention, a system
  is provided for distributing selected real-time, **encoded** , compressed,
  digital video data on demand to one or more display systems for viewing
  by viewers, each...

...the display of the video data to each viewer. It comprises a storage
  capability for storing the **encoded** , compressed, digital video data, the
  data being grouped into distinct programs, each program consisting of
  multiple frames, the storage mechanism allowing multiple, **concurrent**
  access to **different** frames within any given program. A high-speed
  server is provided to selectively retrieve frames of **viewer** - **requested**
  programs from the storage mechanism. One or more network interfaces is
  provided to accept the frames from the server, replicate the frames a
  selected number of times, one copy being for each **viewer** selecting the
  tramsmission of a particular program within a predetermined amount of
  time of other **viewers** , and to format the frames into **transmission**
  packets for **distribution** to the **viewers** .

In accordance with another aspect of the invention, a method is
described for distributing selected real-time...

16/5,K/3   (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00624129
Recording and reproducing apparatus.
Aufzeichnungswiedergabegerat.
Appareil d'enregistrement et de reproduction.
PATENT ASSIGNEE:
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    Kadoma-shi, Osaka 571, (JP), (applicant designated states:
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LEGAL REPRESENTATIVE:
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PATENT (CC, No, Kind, Date): EP 609013 A2 940803 (Basic)
                              EP 609013 A3 951129
APPLICATION (CC, No, Date): EP 94300402 940119;
PRIORITY (CC, No, Date): JP 938596 930121; JP 9392219 930325; JP 93107423
    930409; JP 93205682 930727; JP 93297504 931102; JP 93314114 931119
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC;
  NL; PT; SE
INTERNATIONAL PATENT CLASS: **G11B-013/04 ; G11B-020/10 ; G11B-019/28 ;**
  G11B-020/18 ; G11B-021/02 ; G11B-023/00 ; G11B-023/36

ABSTRACT EP 609013 A2
    A disk-shaped recording medium (2) includes a transparent substrate
    (5), and an optical recording layer (4) and a magnetic recording layer
    (3) formed at one side of the transparent substrate (5). An optical head
    (6) applies light to the optical recording layer (4) from a light source
    via the transparent substrate, and focuses the light on the optical
    recording layer and reproduces information from the optical recording
    layer. A magnetic head (8) records information on the magnetic recording
    layer (3) or reproduces information from the magnetic recording layer. An
    optical head moving device (24,23) serves to move the optical head by a
    movement amount so as to focus the light on an optical track on the
    optical recording layer which has specified address information. A
    magnetic head moving device (20,21,22) serves to move the magnetic head
    to a specified magnetic track on the magnetic recording layer by
    referring to the movement amount of the optical head. (see image in
    original document)
ABSTRACT WORD COUNT: 163

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 940803 A2 Published application (A1with Search Report
                             ;A2without Search Report)
  Examination: 940803 A2 Date of filing of request for examination:
                             940127
*Assignee: 941214 A2 Applicant (transfer of rights) (change):
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Search Report: 951129 A3 Separate publication of the European or
                               International search report
Examination: 970903 A2 Date of despatch of first examination report:
                               970722
Withdrawal: 981223 A2 Date on which the European patent application
                               was deemed to be withdrawn: 980626
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
     CLAIMS A   (English)   EPABF2   3380
     SPEC A   (English)   EPABF2   73994
Total word count - document A   77374
Total word count - document B   0
Total word count - documents A + B   77374

INTERNATIONAL PATENT CLASS:` **G11B-013/04** ...

... **G11B-020/10** ...

... **G11B-019/28** ...

... **G11B-020/18** ...

... **G11B-021/02** ...
... **G11B-023/00** ...

... **G11B-023/36**

...SPECIFICATION forward light by the polarization beam splitter 55,
   traveling through the polarization beam splitter 55 and entering **another**
   polarization beam splitter 56. The reflected light is divided by the
   polarization beam splitter 56 into two...

...head circuit 39 and the optical reproducing 38 and being subjected to
   error correction by an ECC **decoder** 36. As a result, the original
   digital signal is recovered from the reproduced signal. The recovered
   original digital signal is fed to an output section 33. The output
   section 33 is provided with a **memory** which **stores** a quantity of the
   recorded signal (the recorded information) which corresponds to a given
   interval of time. In the case where the **memory** 34 consists of a 1-Mbit
   IC **memory** and a compressed **audio** signal having a bit rate of 250 kbps
   is handled, a quantity of the recorded signal which corresponds to a time
   of about 4 seconds can be **stored** . In the case of an audio player, if
   the optical head 6 moves out of tracking by...

...to an output section 13 at a final stage. In the case where the
   reproduced signal represents **audio** information, the reproduced signal
   is subjected to PCM demodulation before being outputted to an external
   device as...

...transmitted to an input section 21A of the magnetic recording block 9,
   being subjected by the ECC **encoder** 35 in the optical recording block 7
   to a coding process such as an error correcting process...

 16/5,K/19   **(Item 16 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00737987   **Image available**
GLOBALLY TIME-SYNCHRONIZED SYSTEMS, DEVICES AND METHODS
SYSTEMES GLOBALEMENT SYNCHRONISES DANS LE TEMPS
Patent Applicant/Assignee:
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, US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
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Patent and Priority Information (Country, Number, Date):
   Patent: WO 200050974 A2-A3 20000831 (WO 0050974)
   Application: WO 2000US5093 20000228 (PCT/WO US0005093)
   Priority Application: US 99258573 19990226; US 2000513601 20000225
Parent Application/Grant:
   Related by Continuation to: US Not furnished (CIP)
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK
   DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
   LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ
   TM TR TT TZ UA UG US UZ VN YU ZA ZW
   (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
   (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
   (AP) GH GM KE LS MW SD SL SZ TZ UG ZW
   (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **G06F-017/60**
Publication Language: English
Filing Language: English
Fulltext Availability:
   Detailed Description
   Claims
Fulltext Word Count: 80968

English Abstract
   A system and method of fairly and securely enabling time-constrained
   competitions over the Internet (190) among millions of competitors
   compensates for the variable network latencies experienced by client
   machines (160) used by the competitors. The system employs globally time
   synchronized Internet information servers and client machines in order to
   synchronize the initial display of each invitation to respond (e.g. stock
   price to buy or sell, query to answer, or problem to solve) on a client
   machine so each competitor can respond to the invitation at substantially
   the same time, regardless of location, or the type of Internet connection
   used by the client. By using globally time synchronized client machines
   (160), each competitor's response is securely time and space stamped at
   the client machine to ensure that competitor responses are resolved
   within microsecond accuracy.

French Abstract
   La presente invention concerne un systeme et un procede ameliores
   permettant d'organiser de facon equitable et sure des concours restreints
   dans le temps entre des millions de participants via Internet, tout en
   compensant les temps d'attente variables des communications reseau subis
   par les machines clientes utilisees par les participants. Ce systeme
   utilise des serveurs d'informations Internet et des machines clientes
   globalement synchronises dans le temps en vue de synchroniser l'affichage
   initial de chaque invitation a repondre (par exemple, des titres a
   acheter ou a vendre, une requete de reponse, ou un probleme a resoudre)
   sur une machine cliente, de sorte que chaque participant puisse repondre
   a l'invitation presque au meme moment, quel que soit l'endroit ou il se
   trouve, ou le type de connexion Internet utilisee par sa machine cliente.
   De meme, en utilisant des machines clientes globalement synchronisees
   dans le temps, la reponse de chaque participant est estampillee de facon
   sure avec l'heure et le lieu par la machine cliente, afin de garantir que
   les reponses des participants soient traitees avec une precision de
   l'ordre de la microseconde.

Legal Status (Type, Date, Text)
Publication   20000831 A2 Without international search report and to be
                            republished upon receipt of that report.
Search Rpt   20001207 Late publication of international search report
Search Rpt   20001207 Late publication of international search report
Examination   20010705 Request for preliminary examination prior to end of
                            19th month from priority date
Correction   20020829 Corrected version of Pamphlet: pages 1-151,
                            description, replaced by new pages 1-130; pages
                            152-237, claims, replaced by new pages 131-207;
                            pages1/101-101/101, drawings, replaced by new pages
                            1/101-101/101; due to late transmittal by the
                            receiving Office
Republication 20020829 A3 With international search report.
Main International Patent Class: **G06F-017/60**
Fulltext Availability:
  Claims

Claim
... operation of the contest, the real-time video compositor
  920 sends the final video signal to standard **broadcasting** equipment
  930,
  which **transmits** the video signal to the spectators television sets 940
  via cable, satellite, and/or radio waves. Contest-Promoting System Of The
  Present Invention Employing Television
  Based **Client** Machines
  The system components shown in Figs. 7 and 7A and described
  hereinabove enable spectators to passively...

...system components are provided to enable contestants to actively
  participate in the contest through a teievision-based **client** machine.
  As shown in FIGS. 8 and
  8A, a television-based **client** machine 970 in accordance with the
  present
  invention comprises the following the components: a set-top **client**
  machine 970; a IR-based remote-control input device 980; and a standard
  television set 990. As shown, the set-top **client** machine 970 is
  connected to the **user** 's television set 990 using a standard NTSC or PAL
  cable. In addition, the set top **client** machine 970 has connections to
  an antenna or cable, as well as to the Internet using a modem 976 over a
  telephone line to an internet service provider.
  The set-top **client** machine 970 receives and processes contest data,
  including queries through both the modem as well as through...

...will contain live video in standard format,
  Page 86 of 238
  and could optionally contain additional data **broadcast** during the
  vertical blanking interval, perhaps using the IntercastTM format.
  As shown in FIG. 12A, the set-top **client** machine 970 comprises a
  number of major components, namely: a GSU 175 or enhanced GSU 17;,
  clock and timer hardware 290; a television tuner with IntercaStTm
  decoding
  capability 977; a modem 976; an infrared input port 975; NTSC or PAL
  audio/video output 974...

...973; and embedded
  operating system with Java capability 972 running on a microprocessor,
  and a firmware contest **client** 971. Like the computer-based **client**
  machine 160, the set- top **client** machine 970 uses the GPS receiver in
  the GSU to discipline
  the local clock of the **client** machine. This clock is used to trigger
  the
  display of queries on the television screen, as well as to measure the
  elapsed time taken by the **user** when answering queries (or submitting
  responses to ITRs).
  The television-based **client** machine 970 has a number of advantages
  over the computer-based **client** machine 160. First, the bandwidth

requirements on the modem Internet connection are greatly reduced since much of the content is delivered through the television signal. Second, the
set-top **client** machine 970 can be made much more inexpensively as compared to a general purpose computer. For the end- **user** , the set-top box
970 could be even provided at a reduced fee or even for no...

...needed, since the television signal will be fairly well synchronized due to the realtime nature of television **broadcast** , in contrast to the packed-based, storeand-forward architecture of the internet.
Alternative Applications For The GSU...
...clock or
even a GPS device. These functions fall into three basic categories: time and space synchronized **generation** of output events; time and space stamping of
input events; and verification of previously **generated** time and space stamps.
The first category of functionality is the **generation** of output events in response to specific time and space conditions. The GSUcore processor 750 can receive instructions, through a local **user** interface or through an interconnection to another device or computer, that set up time and space constraints...

...action at the instant of the
desired start-time. The action performed in this case was the **decryption**

and display of the contest query. The GSU 175 can be programmed to
 generate an number of different output actions in response to the timespace conditions. However, using the security and **encryption** capabilities of the GSU, the nature of these actions may be concealed until the action is actually...

...such as a
scavenger hunt game in which additional clues are revealed by the GSU as the **player** reaches each sub-goal location.
Page 88 of 238
The second category of functionality is the creation...

...again either through a local operator interface or through a connection to another device or computer to **generate** a time and space stamp. This stamp may or may not be associated with additional input device data. When associated with additional input data, the GSU
 encryption capabilities can be used to **generate** a digital signature on the combined time, location, and input data. This digital signature can later be...

...scanners, fingerprint readers, iris-scanners, vehicle counters, optical sensors for race finish lines, temperature sensors, and signature
capture devices. The applications for a GSU having these inputs are virtually limitless, and the input devices shown...taken and incorporated into the record of the transaction.
The time and space stamp placed on the **captured** image would be digitally
signed by the GSU to allow verification of the image at a later...
...use as peripheral
devices to general purpose personal or business computers. These devices could connect to the **client** computer using PCMCIA slots, ISA/PCI or SCSI
interfaces, or through serial or parallel port connections. Alternatively ...

...also enables
secure and precise calculation of time and space stamps for events that occur at a **client** machine. These stamps are digitally signed so that they may be authenticated and to make them resistant...

...so as long as the specified delay is greater than the worst case latency
expected for the **client** machines of these competitors.
In addition, the Internet-based competition-promoting system of the
present invention can also enable secure time and space-stamping of
client
machine-based activities such as the submission of offers to buy or sell
securities, options or the...

...buy goods being auctioned
off at on-line auction sites. When using the hardware-based GSUhereof,
each **client** machine in the system is enabled to **generate** a
digitally-signed
time and space stamp for each transaction, thereby allowing the **client**
's
Page 91 of 238
transactions to be processed (i.e. executed and cleared) in a secure...

...server 45; one or more real-time price-quotation and trading servers 55;
and a plurality of **client** machines 160. In many respects, the system of
FIG. 5 is similar to the system of FIG...

...The primary server
provides certain functionality to the system, communicating with the
realtime market state server 45, **distributing** quote and other market
data to the real-time price-quotation and trading servers 55, providing a
master clock
for the system, and collecting and performing preliminary processing on
quotation and trade **requests** .
The primary server 100 is substantially similar to that provided for
the contest-based embodiment of the...

...change trader quote delays, and other such activities.
The single primary server 100 communicates indirectly with the **client**
machines through a number of real-time price-quotation and trading
servers

55 These servers relay quotes...

16/5,K/20   (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00474513   **Image available**
CONTENT-BASED VIDEO ACCESS
ACCES A DES IMAGES SUR LA BASE DE LEUR CONTENU
Patent Applicant/Assignee:
  THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS,
  QUEK Francis,
Inventor(s):
  QUEK Francis,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9905865 A1 19990204
  Application: WO 98US15063 19980722   (PCT/WO US9815063)
  Priority Application: US 9753353 19970722
Designated States: CA JP SG US AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC
  NL PT SE
Main International Patent Class: **H04N-005/93**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 19512
English Abstract
  A method, and apparatus (see figure 1), for accessing a video segment of
  a plurality of video frames. The method includes the steps of segmenting
  the plurality of video frames into a plurality of video segments based

upon semantic content and designating a frame of each segment of the
plurality of segments as a keyframe and as an index to the segment (see
figure 7). The method further includes the steps of ordering the
keyframes and placing at least a portion of the ordered keyframes in an
ordered display with a predetermined location of the ordered display
defining a selected location (see figure 7). A keyframe may be designated
as a selected keyframe. The ordered keyframes may be processed through
the ordered display until the selected keyframe occupies the selected
location (see figure 7).

French Abstract

Cette invention se rapporte a un procede et a un appareil (figure 1)
permettant d'acceder a un segment video d'un ensemble de plusieurs images
video. Ce procede consiste a segmenter le groupe d'images video en
plusieurs segments video sur la base du contenu semantique et a designer
une image de chaque segment du groupe de segments comme image clef et
comme repere de ce segment. Ce procede consiste en outre a classer dans
l'ordre des images clefs et a placer au moins une partie des images clefs
classees dans une disposition d'affichage classee, dans laquelle une
position predeterminee definit une position choisie. Une image clef peut
etre designee comme image clef choisie. Les images clefs classees dans
l'ordre peuvent etre traitees sur toute la surface de l'affichage classe
jusqu'a ce que l'image classee selectionnee occupe la position
selectionnee.

Main International Patent Class: **H04N-005/93**
Fulltext Availability:
  Claims

Claim
... representation is
  particularly useful because it optimizes the use of
  screen real-estate, and so permits a **user** to browse
  shots from **different** viewpoints **simultaneously** . In this
  case the animation of the keyframes in each MAR are
  synchronized so that when one...

...representations will centralize the concomitant
  keyframes. Given sufficient computational resources and
  screen real-estate, one may even **play** the synchronized
  video of all viewpoints **simultaneously** . The same set of
  interfaces may be used to view and study the resulting
  organized video. Another...

...law.
  Video may serve as legal courtroom archives either in
  conjunction with or in lieu of stenographically
  generated records. in this case, the domain events to
  be detected in the video are the transitions between...

...episodes in which the witness-box is vacant.
  A witness-box camera may be set up to **capture** the vacant
  witness-box before the proceedings and provide a
  background template from which occupants may be...clusters in the audio
  track.
  In such an application, it is reasonable to expect
  multiple synchronized video **streams** . Again, since the
  underlying thread in our technology is the **time**
  synchrony of the **video** components, we can utilize all
  the same interaction components as in the previous
  example. The multiple video **streams** may be represented
  in the interface as different keyframe windows. This
  allows us to organize, annotate and access the multiple
  video **streams** in the semantic structure of the courtroom
  proceedings. This may be hierarchy of the (possibly
  cross-session) testimonies of particular witnesses,
  direct and cross examination, witness sessions, **question**

and witness response alternations, and individual
utterances by courtroom participants. Hence the
inherent structure, hierarchy, and logic...

...example by using image
vectors extracted by VCM or the vector fields contained
in the standard MPEG **encoding**), the most significant
moving objects in most typical home videos are people.
The same head-detector described...2
locate all moderator utterances. These may be
correlated with the RMS power peaks in the audio **stream** .
The same process will detect presentations to the
membership. Members who speak or rise to speak may...

...speaker-wise
decomposition of the meeting that may be presented in
our multiply-linked interface technology. A **user** may
enhance the structure in our hierarchical editor and
annotator to group sub-shots under agenda items marketing may also
benefit under
the embodiments described above. Mirroring the success
of desktop **publishing** in the 1980's, we anticipate the
immense potential in the production of marketing and
business videos...

 16/5,K/21   (Item 18 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00432616
A COMMUNICATION SYSTEM ARCHITECTURE
SYSTEME, PROCEDE ET PRODUIT MANUFACTURE POUR L'ARCHITECTURE D'UN SYSTEME DE
    COMMUNICATION
Patent Applicant/Assignee:
  MCI COMMUNICATIONS CORPORATION,
  ELLIOTT Isaac K,
  STEELE Rick D,
  GALVIN Thomas J,
  LAFRENIERE Lawrence L,
  KRISHNASWAMY Sridhar,
  FORGY Glen A,
  REYNOLDS Tim E,
  SOLBRIG Erin M,
  CERF Vinton,
  GROSS Phil,
  DUGAN Andrew J,
  SIMS William A,
  HOLMES Allen,
  SMITH Robert S II,
  KELLY Patrick J III,
  GOTTLIEB Louis G,
  COLLIER Matthew T,
  WILLE Andrew N,
  RINDE Joseph,
  LITZENBERGER Paul D,
  TURNER Don A,
  WALTERS John J,
  EASTEP Guido M,
  MARSHALL David D,
  PRICE Ricky A,
  SALEH Bilal A,
Inventor(s):
  ELLIOTT Isaac K,
  STEELE Rick D,
  GALVIN Thomas J,
  LAFRENIERE Lawrence L,

KRISHNASWAMY Sridhar,
FORGY Glen A,
REYNOLDS Tim E,
SOLBRIG Erin M,
CERF Vinton,
GROSS Phil,
DUGAN Andrew J,
SIMS William A,
HOLMES Allen,
SMITH Robert S II,
KELLY Patrick J III,
GOTTLIEB Louis G,
COLLIER Matthew T,
WILLE Andrew N,
RINDE Joseph,
LITZENBERGER Paul D,
TURNER Don A,
WALTERS John J,
EASTEP Guido M,
MARSHALL David D,
PRICE Ricky A,
SALEH Bilal A,

English Abstract
  Telephone calls, data and other multimedia information is routed through
  a hybrid network which includes transfer of information across the
  internet. A media order entry captures complete user profile information
  for a user. This profile information is utilized by the system throughout
  the media experience for routing, billing, monitoring, reporting and
  other media control functions. Users can manage more aspects of a network
  than previously possible, and control network activities from a central
  site.

French Abstract
  Des appels telephoniques, des donnees et autres informations multimedias
  sont achemines par un reseau hybride capable egalement de transmission de
  donnees par l'Internet. Une rubrique d'ordonnancement des supports
  utilise en mode exclusif des informations completes de profils
  utilisateurs concernant un meme utilisateur. Ces informations de profils
  sont utilisees par le systeme, pendant toute la duree active du support,
  a des fins d'acheminement, de facturation, de surveillance, de
  compte-rendu et autres fonctionnalites de gestion de supports. Les

utilisateurs peuvent ainsi gerer un plus grand nombre de fonctionnalites
reseau et gerer des activites reseau depuis un site central.

...International Patent Class: **HO4N-007/14**
Fulltext Availability:
  Detailed Description

Detailed Description
... switched from PS1-N Interface 257 to PSTN Interface 258 using the TDM
  bus 260.

  Similarly, PCM **audio** is switched from PSTN Interface 258 to PSTN
  Interface 257 using the TDM bus 260.

  In the...service, they must be authorized for use of the service and may
  be given
  security tokens or **encryption** keys to ensure access to the service.
  This
  authorization responsibility might also place restrictions upon the types
  ....calls. This on-line registration message would most likely be sent to
  the directory service in an **encrypted** format for security. The
  encryption
   The IP address identifying the port that is being used to connect this
  computer to the network...

...the message was received and processed. This
  acknowledgment message may also contain some sort of security or
  encryption key to guarantee secure communication with the directory
  service when issuing
  additional commands. When the PC receives...calls. This on-line
  registration message would most likely be sent to the directory service
  in an **encrypted** format for security. The **encryption** would be based
  upon an common key shared between the PC and the directory service. This
  message...the message was received and processed. This acknowledgment
  message may also contain some sort of security or **encryption** key to
  guarantee secure communication with the directory service when issuing
  additional commands. When the PC receives...

  16/5,K/22   (Item 19 from file: 349)
  DIALOG(R)File 349:PCT FULLTEXT
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  00418748   **Image available**
  **SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS
      PROTECTION**
  **SYSTEMES ET PROCEDES DE GESTION DE TRANSACTIONS SECURISEES ET DE PROTECTION
      DE DROITS ELECTRONIQUES**
  Patent Applicant/Assignee:
    INTERTRUST TECHNOLOGIES CORP,
  Inventor(s):
    GINTER Karl L,
    SHEAR Victor H,
    SIBERT W Olin,
    SPAHN Francis J,
    VAN WIE David M,
  Patent and Priority Information (Country, Number, Date):
    Patent: WO 9809209 A1 19980305
    Application: WO 97US15243 19970829 (PCT/WO US9715243)
    Priority Application: US 96706206 19960830
  Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES
    FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN
    MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
    GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI
    FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
  Main International Patent Class: **G06F-001/00**
  Publication Language: English

Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 195626

English Abstract
   The present invention provides systems and methods for electronic
   commerce including secure transaction management and electronic rights
   protection. Electronic appliances such as computers employed in
   accordance with the present invention help to ensure that information is
   accessed and used only in authorized ways, and maintain the integrity,
   availability, and/or confidentiality of the information. Secure
   subsystems used with such electronic appliances provide a distributed
   virtual distribution environment (VDE) that may enforce a secure chain of
   handling and control, for example, to control and/or meter or otherwise
   monitor use of electronically stored or disseminated information. Such a
   virtual distribution environment may be used to protect rights of various
   participants in electronic commerce and other electronic or
   electronic-facilitated transactions. Secure distributed and other
   operating system environments and architectures, employing, for example,
   secure semiconductor processing arrangements that may establish secure,
   protected environments at each node. These techniques may be used to
   support an end-to-end electronic information distribution capability that
   may be used, for example, utilizing the "electronic highway".

French Abstract
   La presente invention concerne des systemes et des procedes de commerce
   electronique comprenant une gestion de transactions securisees et la
   protection de droits electroniques. Des appareils electroniques tels que
   des ordinateurs utilises conformement a la presente invention contribuent
   a assurer que l'acces aux informations et l'utilisation des informations
   ne se font que par des voies autorisees et ils maintiennent l'integrite,
   la disponibilite et/ou la confidentialite des informations. Des
   sous-systemes securises utilises avec ces appareils electroniques
   constituent un environnement de distribution virtuel (VDE) reparti
   pouvant faire valoir une chaine securisee de traitement et de commande,
   par exemple, pour commander et/ou mesurer ou encore controler
   l'utilisation d'informations memorisees ou disseminees electroniquement.
   Cet environnement de distribution virtuel peut etre utilise pour proteger
   les droits de divers participants dans le commerce electronique et dans
   d'autres transactions electroniques ou dans lesquelles intervient
   l'electronique. Des environnements et des architectures de systemes
   repartis securises et autres systemes d'exploitation emploient, par
   exemple, des arrangements de traitement a semi-conducteurs securises
   pouvant etablir des environnments proteges securises a chaque noeud. On
   peut utiliser ces techniques pour apporter un soutien a une capacite de
   distribution d'informations electroniques de bout-en-bout pouvant etre
   utilisees, par exemple, en empruntant l'"autoroute electronique".

Main International Patent Class: **G06F-001/00**

 16/5,K/23   (Item 20 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00344642
**SYSTEMS AND METHODS FOR SECURE TRANSACTION MANAGEMENT AND ELECTRONIC RIGHTS
     PROTECTION**
**SYSTEMES ET PROCEDES DE GESTION SECURISEE DE TRANSACTIONS ET DE PROTECTION
     ELECTRONIQUE DES DROITS**
Patent Applicant/Assignee:
  ELECTRONIC PUBLISHING RESOURCES INC,
Inventor(s):
  GINTER Karl L,
  SHEAR Victor H,
  SPAHN Francis J,

English Abstract
  The present invention provides systems and methods for electronic
  commerce including secure transaction management and electronic rights
  protection. Electronic appliances such as computers employed in
  accordance with the present invention help to ensure that information is
  accessed and used only in authorized ways, and maintain the integrity,
  availability, and/or confidentiality of the information. Secure
  subsystems used with such electronic appliances provide a distributed
  virtual distribution environment (VDE) that may enforce a secure chain of
  handling and control, for example, to control and/or meter or otherwise
  monitor use of electronically stored or disseminated information. Such a
  virtual distribution environment may be used to protect rights of various
  participants in electronic commerce and other electronic or
  electronic-facilitated transactions. Secure distributed and other
  operating system environments and architectures, employing, for example,
  secure semiconductor processing arrangements that may establish secure,
  protected environments at each node. These techniques may be used to
  support an end-to-end electronic information distribution capability that
  may be used, for example, utilizing the "electronic highway".

French Abstract
  Systemes et procedes destines au domaine du commerce electronique, et
  notamment a la gestion securisee des transactions et a la protection
  electronique des droits. Les appareils electroniques tels que les
  ordinateurs utilises conformement a la presente invention permettent
  d'assurer que les informations ne sont consultees et exploitees que de
  maniere autorisee, et ils conservent l'integrite, la disponibilite et/ou
  le caractere confidentiel des informations. Les sous-systemes securises
  utilises en association avec de tels appareils electroniques constituent
  un environnement de distribution virtuel distribue (VDE) apte a imposer
  une chaine securisee de traitement et de commande, par exemple pour la
  commande et/ou la mesure ou encore le controle de l'utilisation
  d'informations stockees ou diffusees electroniquement. Cet environnement
  de distribution virtuel peut servir a proteger les droits de differents
  individus impliques dans le commerce electronique et dans d'autres
  transactions electroniques ou assistees par des moyens electroniques. On
  a egalement prevu des environnements et architectures de systeme
  d'exploitation distribues, securises et autres mettant en oeuvre, par
  exemple, des ensembles de traitement securise a semi-conducteurs pouvant
  etablir des environnements securises et proteges au niveau de chaque
  noeud. Ces techniques peuvent servir de soutien pour une fonction
  electronique de distribution d'informations de bout en bout, cette
  fonction etant utilisable, par exemple, dans le domaine de l'"autoroute
  electronique".

Detailed Description
... more independent clearinghouses and then back
to the content providers, including content creators.

The same and/or **different** pathways employed for
certain content handling, and related content control
information and reporting information handling,
may also...types and client requirements. In addition, the
- 266
ability to dynamically assemble independently deliverable
components at execution **time** based on particular objects and
users provides a high degree of flexibility, and facilitates or
enables a...

16/5,K/24   (Item 21 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00316016
MULTI-CAST DIGITAL VIDEO DATA SERVER USING SYNCHRONIZATION GROUPS
SERVEUR MULTIDESTINATAIRE DE DONNEES VIDEO NUMERIQUES UTILISANT DES GROUPES
   DE SYNCHRONISATION
Patent Applicant/Assignee:
 UNISYS CORPORATION,
Inventor(s):
 BAKER Donn Burke,
 JOHNSON David R,
 SIPPLE Ralph E,
Patent and Priority Information (Country, Number, Date):
 Patent: WO 9534169 A1 19951214
 Application: WO 95US7199 19950606 (PCT/WO US9507199)
 Priority Application: US 94255014 19940607
Designated States: CA JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **H04N-007/173**
Publication Language: English
Fulltext Availability:
 Detailed Description
 Claims
Fulltext Word Count: 12671

English Abstract
 A system and method for distributing real-time, compressed, digital
 video data from a video library (10) composed of multiple mass storage
 devices through a digital video data server (12) to large numbers of
 viewers via distribution networks (20) is provided. The server obtains
 selected frames of video data for viewer-requested programs from
 high-speed memory using a buffering strategy, replicates the data via a
 multi-cast technique for each viewer listed in an assigned
 synchronization group and forwards the data to each viewer's site where
 it is decompressed, decoded, and converted for display on a television
 monitor (24) or computer display (26). Each viewer maintains interactive
 control over the transmission of the digital video data.

French Abstract
 L'invention concerne un systeme et un procede pour distribuer a de grand
 nombres de telespectateurs, par l'intermediaire de reseaux de
 distribution (20), des donnees video numeriques comprimees en temps reel
 contenues dans une bibliotheque video (10) composee de multiples memoires
 de masse, par l'intermediaire d'un serveur de donnees video numeriques
 (12). A l'aide d'une strategie de tamponnage, ce serveur va chercher dans
 la memoire rapide des images selectionnees des donnees video relatives
 aux programmes demandes par le telespectateur, reproduit ces donnees par
 l'intermediaire d'une technique multidestinataire pour chaque
 telespectateur recense dans un groupe de synchronisation affecte et
 transmet ces donnees au domicile de chaque telespectateur ou elles sont

decompressees, decodees, et converties pour etre affichees sur un
moniteur de television (24) ou un ecran d'ordinateur (26). Chaque
telespectateur conserve une commande interactive sur la transmission des
donnees video numeriques.

Main International Patent Class: **HO4N-007/173**
Fulltext Availability:
  Detailed Description

Detailed Description
... · demand to more viewers.   ·   ·   ·   ·   ·

  In accordance with an aspect of this invention, a system is provided for
   distributing %elected real-time, **encoded** , compressed, digital video
  data on **demand** to one or more display systems for viewing by **viewers** ,
  each **viewer** being resident at a different site. 'Me system provides
  VCR-type control over the display of the video data to each **viewer** . It
  comprises a storage capability for **storing** the **encoded** , compressed,
  digital video data, the data being grouped into distinct programs, each
  program consisting of multiple frames, the storage mechanism allowing
  multiple, **concurrent** access to **different** frames within any given
  program. A high-speed server is provided to %electively retrieve frames
  of **viewer** – **requested** programs from the storage mechanism. One or more
  network interfaces is provided to accept the frames from the server,
  replicate the frames a selected number of times, one copy being for each
  viewer selecting the **transmission** of a particular program within a
  predetermined amount of time of other **viewers** , and to format the frames
  into **transmission** packets for **distribution** to the **viewers** .

  In accordance with another aspect of the invention, a method is described
  for distributing selected real-time...   ·   ·   ·   ·   ·

  16/5,K/25   (Item 22 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00156314
SIGNAL PROCESSING APPARATUS AND METHODS
DISPOSITIF ET PROCEDES DE TRAITEMENT DE SIGNAUX
Patent Applicant/Assignee:
  HARVEY John C,
Inventor(s):
  HARVEY John C,
  CUDDIHY James W,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 8902682 A1 19890323
  Application: WO 88US3000 19880908   (PCT/WO US8803000)
  Priority Application: US 8796 19870911
Designated States: AT AU BE BJ BR CF CG CH CM DE DK FI FR GA GB GB HU IT JP
  KP· LK LU MC MG ML MR·MW NL NO RO SE SN SU TD TG   ·   ·   ·
Main International Patent Class: H04K-007/00
International Patent Class: **H04N-07:16**
Publication Language: English
Fulltext Availability:
  Detailed Description   ι·
  Claims
Fulltext Word Count: 161690

English Abstract
  A unified system of programming communication. The system encompasses
  prior art communications (such as, for example, television, radio,
  electronically transmitted print, and computer communications) and new
  user specific mass media. Within the unified system, computer system
  means (205) and methods provide capacity for generating relevant user
  specific information simultaneously at each station (26) of a plurality
  of subscriber stations (26).

French Abstract
Systeme unifie de communication a programmation regroupant les
communications de l'art anterieur (telles que par exemple la television,
la radio, l'impression transmise electroniquement, et les communications
par ordinateur) ainsi que les nouveaux mass medias specifiques aux
utilisateurs. Dans le systeme unifie, des moyens (205) et procedes
mettant en oeuvre des systemes d'ordinateurs ont la capacite de produire
des informations specifiques a un utilisateur particulier, simultanement
a chaque poste (26) d'une pluralite de postes d'abonnes (26).

International Patent Class: **H04N-07:16**
Fulltext Availability:
  Claims

Claim
... the primary image on the television
display. in this fashion, two peripheral units can be viewed
30 **simultaneously** on one television receiver. U.S. Patent to
Freeman et. al. No. 4,264,925 describes a multi-channel
programming transmission system wherein subscribers may
select manually among related programming alternatives
transmitted **simultaneously** on **separate** channels.
This prior art, t@o, is limited. It has no capacity
for interconnecting or operating a...output apparatus. It
,25 has no capacity for automatically identifying decryption keys
and inputting them to a **decryptor** to serve as the key for any
step of **decryption** . It has no capacity for identifying and
recording the identity of what is input to or output from a
 decryptor , It has no capacity for **decrypting** a transmission
30 then embedding a signal in the transmission--let alone for
simultaneously embedding user specific ...O
ftiliire-tm reconcile aspects of these individual areas of
art--monitoring programming, automating ultimate receiver
stations, **decrypting** programming,-generating the programming
itself, etc.@@into an integrated system. These limitations
5 are both technical and...

...As a second example, because of the lack of a viable
independent audit system, each service that **broadcasts**
 encrypted programming controls and services at each
subscriber-station one or more receiver/ **decryptors** dedicated

3 to its service alone. Lacking a viable audit system,
services do not transmit to shared...compact forms, thereby
5 maximizing the capacity of any given transmission means to
communicate signal information.
Yet **another** objective is expandability. As the
operating capacities of computer hardware have grown in
recent decades, increasingly sophisticated...and determines that said
information at memory matches particular X-token information.
(Said X-token information is **different** token-comparison
35 information from the W-token information matched by the
length@token of the first...or more, not to cease at the proper time and
to continue
beyond said time (until such **time** as some subsequent command
may execute "GRAPHICS OFF" or clear information from said
video RAM at said...to match-information at SPAM-first
15 precondition register memory-@including all stations that are
preprogrammed with **decryption** key information of J but not
with **decryption** key information of Z@@particular first@
condition-test-failed instructions of said conditio nal@
overlay-at@205...

...EOFS valve, 39H, to control processor, 39J,
and commence transferring information from control processor,
39J, to the **PC** @MicroKey System of microcomputer, 205; to

30 transmit the instruction, "GRAPHICS ON", to said PC -MicroKey
System; to cause matrix switch, 391, to cease transferring
information from control processor, 39J, to said PC -MicroKey
System; and to complete all conditional-overlay-at-205
instructions and controlled functions-invoked by said second

3 message at the secondary control level.
Transmitting the instruction, "GRAPHICS ON". to the
 PC -MicroKey System of the subscriber station of Fig* 3 (and
transmitting "GRAPHICS ON" to other PC -MicroKey Systems at
other subscriber stations where the program instruction set
5of the first message has been run a – a microcomputer, 205,
and where said second message causes "GRAPHICS ON" to be
causes said PC -MicroKey, System to combine the
programming of Fig. 1A and of Fig* 1B and transmit the
.combined...

...is 'Compared-to 11011, Said matches cause the control
processors, 39J, of said stations to complete the decrypt
process-and-meter-current header-message instructions of
 ...of meter
information at a station where inefficient operation of a
microcomputer, 205, prevented combining; then the decoder -203
10 source mark of the decoder , 203, of said station; then
information of the decryption mark of key J information
recorded at SPAM@ decryption @mark register memory of said
station; then.all of the received binary information of said
second message...

...transfer
the aforementioned head@r information that identifies a
conventional transmission of meter information then the
aforementioned decoder @203 source mark then information of
the information recorded at said SPAM@ decryption -mark
register memory , which is the decryption mark of key J, then
41
all of the received binary information of said second message
that is recorded at said SPAM-input@signal memory ; then to
cause matrix switch, 391, to cease transferring information
from control processor, 39J, to said buffer...

...of said portion cause control
5 processor, 39J. to enter 11111 at said SPAM-Flag-monitor-info
 memory ; to enter I'll' at the aforementioned SPAM@Flag-primary
level-3rd-step-incomplete register memory ; and to determine
that a comparison of the information at the aforementioned
SPAM@Flag-primary@level-2nd-step@ incomplete register memory
10 with a particular preprogrammed 11111 results in a match,
signifying the completion of the process portion of said
 decrypt -process-and-meter-current header-message
instructions.
Resulting in a match causes control processor, 39J, to
15 complete said decrypt -process-and.-meter-current header
message instructions and all controlled functions of said
second message.
Completing the...
...to receive the next SPAM message, Automatically,
control processor, 39J. compares-the information at said
SPAM@header memory to particular preprogrammed cause
retention-of@exec information that is 110111, No match
results, -Not resulting in...

...to execute-particular collect monitor 'Information and to
compare the information at said SPAM-Flag@monitor@info memory
with particular preprogrammed 11011 information. No match
results,
(By contrast, matches result at every station that is

30 preprogrammed. to collect monitor information where said
second message is **decrypted** but Fig. 1C image information is
not displayed.because the "program unit identification code"
information in said second message fails to match information
at SPAM-first@precondition reqister@ **memory** . Said matches
35 cause the control processors, 39J. of said stations to
execute the aforementioned collect@monitor...

...no combining
occurred because first precondition program unit information t
failed to match and which transmission contains **decryption**
mark information, then to transfer the aforementioned
 decoder -203 source mark information, then information of the
10 **decryption** mark of key J information recorded at SPAM
 decryption @mark register **memory** , then all of the received
binary information of said second message that is recorded at
the SPAM...

...Then said instructions cause said control processors,
39JI, to place 11111 at said SPAM@Flag@monitor@info **memory** , at
the aforementioned SPAM@Flag@first@condition-failed **memory** ,
and at the aforementioned SPAM@Flag@do@not-meter **memory** and
20 to continue executing conventional control instructions,
a
Then the conventional control instructions of said stations
cause said control processors, 39J. to cause all apparatus of
the controllers, 39, to delete from **memory** all-information of
said second message and to commence waiting to receive
25 information of a subsequent...

...of Fig. 3f
causes control processor, 39J, to cause all apparatus of
controller, 39, to delete from **memory** all information of said
second message; to cause matrix switch, 391, to commence
 transferring information from the EOFS valve identified by
the information at the aforementioned SPAM-primary-input
source register **memory** , which is EOFS valve, 39F, to control
processor, 39J; and to commence waiting to receive
35 information...meter & monitor information (#4)
causes buffer/comparator, 14, automatically to compare the
header information that identifies a **transmission** of meter
5information to particular preprogrammed header
identification-@14 information A match results with the
aforementioned meter...

```
Set     Items    Description
S1      69612    CLIENT? OR VIEWER? OR USER? OR STANDALONE OR STAND()ALONE -
                 OR PC OR PCS OR PERSONAL()COMPUTER? OR WORKSTATION? OR WORK()-
                 STATION? OR NODE?
S2      14026    REQUEST? OR ASK OR ASKS OR ASKED OR ASKING OR PETITION? OR
                 CALL()(ON OR UPON) OR QUER? OR QUESTION? OR INQUIR? OR DEMAND?
                 OR REQUISITION OR APPLY OR APPLYING
S3      18979    CAPTUR? OR MEMORY OR CACHE? OR STORE? ? OR STORING OR SAVE
                 OR SAVING OR KEEP? ? OR KEEPING
S4      13583    (TV OR TELEVISION OR RADIO)()(SHOW? OR PROGRAM? OR BROADCA-
                 ST?) OR MEDIA()ASSET? OR VIDEO? OR AUDIO? OR MULTIMEDIA OR ME-
                 DIA
S5      25106    TIME OR SCHEDULE? OR PERIOD OR DURATION OR SIMULTANEOUS? OR
                 CONCURRENT?
S6       3563    ENCOD??? OR DECOD??? OR ENCRYPT??? OR CIPHER? OR CYPHER? OR
                 DECRYPT? OR CYPHERTEXT OR ENCYPHER? OR UNCOD? OR UNENCRYPT? -
                 OR ENCIPHER? OR UNCOD? OR DECIHER? OR UNCYPHER? OR UNCYPHER? -
                 OR CYPTO?
S7      22705    PUBLISH? OR ISSUE OR DISPURS? OR DISTRIBUT?
S8      18264    DIFFERENT OR ANOTHER OR SEPARATE OR TARGET
S9      29718    TRANSFER? OR STREAM? OR SEND? OR TRANSMIT? OR TRANSMISSION
                 OR GENERAT? OR PLAY? OR BROADCAST?
S10        18    S1 AND S2 AND S3 AND (S4 (3N) S5)
S11     45574    S7 OR S9
S12        16    S10 AND S11
S13       332    S8 (3N) S5
S14         0    S12 AND S13
S15         0    S12 AND DIFFERENT()TIME
S16         0    S10 AND S13
File 256:SoftBase:Reviews,Companies&Prods. 82-2003/May
     (c)2003 Info.Sources Inc
```

01714437   DOCUMENT TYPE: Product

PRODUCT NAME: DVRex RT Professional (714437)

Canopus Corp (649945)
711 Charcot Ave
San Jose, CA 95131 United States
TELEPHONE: (408) 954-4500

RECORD TYPE: Directory

CONTACT: Sales Department

Canopus's DVRex RT Professional is a scalable digital video editing (DVE)
system that offers RS-422 analog deck control and balanced audio I/O. DVRex
RT Professional allows **users** to **capture** video through on-board IEEE
1394 and composite connectors. Through the IEEE 1394 interface, DVRex RT
also offers deck and camera control of DV and DVCAM devices. It uses RS-422
to support deck and camera control of analog devices. The system also can
produce **video** in real **time** to DV or analog. DVRex RT outputs to MPEG-1,
MPEG-2, and **streaming** video files. Video can be delivered on tape, CD,
DVD, or to the Web. The audio clock is genlocked to video reference,
streamlining audio and video synchronization **demands** . Balanced audio
cables and connectors limit noise. The DVRex RT Professional package
includes the Canopus RexEdit 2.91 and Adobe Premiere 6.0 editing tools,
along with Boris Graffiti (TM), DVDit! (C) SE, and Sonic Foundry ACID.
Tapping Premiere's titler and Boris Graffiti, producers can create multiple
titles in real time, adding motions and attributes to individual titles.
DVRex RT includes color correction, luma-key, chromakey, parametric
equalizer, delay, and high- and low-pass filters. A video that demonstrates
the system's features can be accessed on the Canopus Web site.

DESCRIPTORS: Digital Video; DVD; Electronic **Publishing** ; Graphics Tools;
    Multimedia

HARDWARE: IBM PC & Compatibles; Pentium
OPERATING SYSTEM: Windows NT/2000
PROGRAM LANGUAGES: Not Available
TYPE OF PRODUCT: Micro
POTENTIAL USERS: Video Editing
PRICE: $4,399; includes three-year limited warranty

OTHER REQUIREMENTS: 256MB RAM; Win NT 4+; dual 450MHz+ Pentium+ CPUs; two
    free PCI slots;
SERVICES AVAILABLE: Warranty
REVISION DATE: 020625

01059251   DOCUMENT TYPE: Product

PRODUCT NAME: StreamPix **(059251**

NorPix Inc (477303)
1751 Richardson #2517
Montreal, PQ H3K 1G6 Canada
TELEPHONE: (514) 846-0009

RECORD TYPE: Directory

CONTACT: Sales Department

NorPix's **StreamPix** is a Windows-based digital video recording software
package that can record real- **time** **video** to hard disk at rates of up to
60MBps. The system is ideal for applications such as motion analysis, image
archiving, flow analysis, medical imaging, and Web inspection. Cameras
supported include standard RS-170/CCIR, NTSC/PAL, digital formats, 8- to
16-bit monochrome, and color RGB and high resolution 1k x 1k. **StreamPix**
supports Matrox frame grabbers and other boards on **request** . The software
can process results with third-party toolkits such as Visilog or Matrox
MIL, and it supports Matrox Meteor2. **StreamPix** features VCR-like
controls, including Record, **Play** , Rewind, Fast Forward, Step, and Pause.
Users can export images as BMP or TIFF files, or **play** back AVI-style
movies. **Users** can acquire from color RGB, NTSC, monochrome RS170, or high
resolution 1k x 1k cameras at up to 60 megabytes per second. The system
offers real- **time** digital **video** recording directly to **memory** or to
fast IDE hard disk.

DESCRIPTORS: Digital Video; Graphics for Science & Engineering; Image
Processing; Quality Assurance; Real **Time** Data Acquisition; **Video**
Frame Grabbers; Webcams

HARDWARE: IBM PC & Compatibles
OPERATING SYSTEM: Windows NT/2000
PROGRAM LANGUAGES: ·Not Available
TYPE OF PRODUCT: Micro
POTENTIAL USERS: Real-Time Video, Web Inspection Systems, Medical,
Manufacturing
PRICE: Available upon request

REVISION DATE: 20011130

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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01058637   DOCUMENT TYPE: Product

PRODUCT NAME: WebCine Server (058637)

Philips Digital Networks (703796)
1000 W Maude Ave
Sunnyvale, CA 94085-2810 United States
TELEPHONE: (408) 617-4900

RECORD TYPE: Directory

CONTACT: Sales Department

Philips Digital Networks' WebCine Server delivers on- **demand** **streaming**
of MPEG-4 multimedia files. Files can be delivered to Internet or intranet
users . WebCine Server offloads packetization operations to the WebCine
Encoder, improving **streaming** performance. With that, WebCine Server can
support up to 1,000 concurrent connections. The WebCine Server package
includes a Pentium III computer, a Linux operating system, 256MB of **memory**
, and 40GB of local disk storage. The system is integrated easily with
existing Web servers, requiring only the creation of hyperlinks between
servers. Additionally, WebCine Server employs widely used protocols, such
as the Real-Time Transport Protocol (RTP) and the Real-Time **Streaming**
Protocol (RTSP), further **streamlining** integration. The two protocols
offer controlled, real- **time** delivery of synchronized **audio** and video
content over IP networks. Future versions of WebCine Server will offer
embedded content rights management, packet loss recovery, and advanced·
interactive features.

DESCRIPTORS: Content Providers; Digital Video; Intranets; **Streaming**

Media; Web Servers; **Workstations**

HARDWARE: IBM PC & Compatibles; Pentium
OPERATING SYSTEM: Linux
PROGRAM LANGUAGES: Not Available
TYPE OF PRODUCT: Micro; Workstation
POTENTIAL USERS: Video and Audio Streaming, Multimedia Streaming, Content
     Providers
PRICE: Available upon request; includes Linux workstation

REVISION DATE: 20020228

12/5/4
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00141232   DOCUMENT TYPE: Review

PRODUCT NAMES: MPEG 4 (832146); LSI Domino (139483)

TITLE: The Next MPEG Step: Chip makers are gearing up for a new video...
AUTHOR: Takahashi, Dean
SOURCE: Electronic Business,   v28 n9 p80(5) Sep 2002
ISSN: 0163-6197
HOMEPAGE: http://www.eb-mag.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

LSI Logic's programmable LSI Domino chip will be upgraded easily with
software to support MPEG's MPEG-4, says a spokesperson for LSI, but Sigma
Designs says there will be a good market for dedicated silicon. Both
methods would allow **users** to **capture   video** any **time** , in any
location, and to expect that content can be exchanged and shown on any
device. MPEG-4 has been embraced by chip makers for its improved
compression, but the **question** of MPEG-4's profitability looms. MPEG-4
images look better, and can blend graphics and other interactive elements,
say proponents, and MPEG-4 **transmits** well over phone lines, **broadcast** ,
cable, or wireless, with data rates from 5 Kbps to 50 megabits per second.
MPEG-4, therefore, can show a small video on a cell phone or a rich image
on a digital TV. Obstacles slowing adoption, however include disagreement
over MPEG-4 licensing, and another is strong competition from MPEG-2 and
from vendors who support their own video compression technologies,
including Microsoft and RealNetworks. One expert says MPEG-4's life will be
limited because so much more can be put on a chip, so chip makers will have
to carefully strategize in adopting MPEG-4. Currently there are 19
variations of MPEG-4, which are called profiles, and deploying them in
silicon will be difficult. Because of various limitations in the hybrid
solution market for MPEG-4, some makers are seeking other customers,
including foreign phone companies.

COMPANY NAME: Vendor Independent   (999999); LSI Logic Corp   (352756)
SPECIAL FEATURE: Graphs Charts
DESCRIPTORS: Computer Equipment; Digital Video; File Compression
REVISION DATE: 20030228

12/5/5
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00122160   DOCUMENT TYPE: Review

**PRODUCT NAMES: Visual Collaboration Application Server (VCAS)   (792217);
eVideo Application Server (792229); VTEL SmartStation   (694754);**

Conference Server   (106682); Meeting Point Conference Server   (691968)

TITLE: Enablers for IP videoconferencing
AUTHOR: Edwards, Morris
SOURCE: Communications News,   v36 n12 p90(2) Dec 1999
ISSN: 0010-3632
HOMEPAGE: http://www.comnews.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

PictureTel's Visual Collaboration Application Server (VCAS) and eVideo
Application Server, VTEL's SmartStation, and White Pine Software's CU-SeeMe
and MeetingPoint Conference Server are highlighted in a discussion of tools
that enable IP videoconferencing, or bi-directional videoconferencing over
IP networks. PictureTel has announced one of the most comprehensive plans
to offer live, real- **time** **videoconferences** and other **video** - enabled
services over IP networks. The initiative, which is called Visual
Collaboration for the Net (VCN), uses the full span of desktop and group
videoconferencing products and services with network access and transport
abilities provided through major network service providers. A primary
component of VCN is VCAS, which permits collaborative conferencing,
streaming , and **broadcasting** of events via a Web video portal. **Users**
access VCAS through an Internet service provider (ISP) and standard
browser, and can schedule and participate in live videoconferences over IP
and ISDN networks. **Streaming** video and slides can be presented to a
widely separated audience, and **users** can provide distance learning
sessions that use experts and **stored** video on **demand** . A previously
broadcast and archived event can also be viewed. eVideo Application Server
creates, **distributes** , and manages **streaming** video applications over IP
networks. VTEL SmartStation desktop and WG500 workgroup videoconferencing
systems permit clickable connections to digital and IP networks
call-by-call.

COMPANY NAME: PictureTel Corp (482641); Forgent Networks Inc (725986);
    First Virtual Communications (665606)
SPECIAL FEATURE: Charts
DESCRIPTORS: Conferencing; Meetings & Conventions; Network Servers;
    Presentations; Videoconferencing; VoIP
REVISION DATE: 20021125

 12/5/6
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00113683   DOCUMENT TYPE: Review

PRODUCT NAMES: Matrox DigiSuite (733491)

TITLE: **DigiSuite Makes Real-Time Lossless Editing Affordable**
AUTHOR: Yager, Tom
SOURCE: DCC Magazine,   v1 n1 p44(2) Nov 1998
ISSN: 1077-5862
HOMEPAGE: http://www.advanstar.com

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: A

Matrox's Matrox DigiSuite offers strong **PC** -based digital video
facilities. The product is a combination of hardware and software that
gives the **PC** the ability to **capture** , **play** back, and manipulate
digital video. Assuming there is enough hard drive space, DigiSuite can
play back two channels of full-resolution lossless **video** ,
simultaneously and in real time. While it is **playing** , **users** can **apply**

TBC proc amp settings, tint, and other parameters. All effects can be combined without sacrificing real-time **playback** , so long as **users** stay within two video layers and one graphics layer. The DigiSuite has plenty of third-party support, although it is fully functional even without enhancements. DigiSuite is available in two option packages: loaded, and comfortably equipped. The loaded version comes with DigiMix, DigiMotion, an audio connector panel, and a video connector panel. The lossless video is still compressed, but done in such a way that video quality is not affected. DigiSuite is bundled with Adobe Premiere 5.0 for editing. Also, because it has multiple channels of 2D DVE, it is possible to scale and perform animated movies on all three layers simultaneously. It also brings hardware-assisted compositing with unlimited layers.

PRICE: $9995

COMPANY NAME: Matrox Electronic Systems Ltd (621641)
SPECIAL FEATURE: Screen Layouts
DESCRIPTORS: Digital Video; Graphics Tools; IBM **PC** & Compatibles; Image
    Processing
REVISION DATE: 20010730

12/5/7

00110121   DOCUMENT TYPE: Review

**PRODUCT NAMES: Vosaic (678791); Java (573744); Emblaze (712876); Media
Framework (713805)**

TITLE: Java Does Video
AUTHOR: Johnson, Nels
SOURCE: Digital Video Magazine,   v6 n7 p68(2) Jul 1998
ISSN: 1075-251X
HOMEPAGE: http://www.dv.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Netscape Communications' Media Framework, GEO's Emblaze, and Vosaic's namesake product are highlighted in a discussion of the use of Sun Microsystems' Java language in digital video production. Media Framework is a recent implementation, RealNetworks has a Java deal with Sun, and some other smaller vendors are also developing **streaming** video based on Java code. However, on most consumers' computers, Java's (but not JavaScript's) performance is less than adequate. GTS is a good example of a company dedicated to Java-based **streaming** video. GTS uses Java by **streaming** JPEG images and audio data from a server to an applet on a **client** that runs a Web browser. The applet shows the JPEG **stream** as a video sequence on a World Wide Web page, while **concurrently** rendering the **audio** track. Vosaic is regarded as the next **generation** of on- **demand** **streaming** of **stored** video assets. Vosaic's media server processes video, audio, and synchronization data, or three separate video **streams** , and can adjust them on the fly in real-time according to bandwidth conditions. **Standalone** audio **streams** are processed with a Java applet. Emblaze enables a Java-based audio **stream** to run as fast as the system allows, but for video **streaming** , Emblaze is not as effective, say many Webmaster interviewed.

COMPANY NAME: Vosaic LLC (638072); Sun Microsystems Inc (385557);
    Emblaze Systems Ltd (E-Sys) (631078); Netscape Communications Corp
    (592625)
SPECIAL FEATURE: Screen Layouts
DESCRIPTORS: Electronic **Publishing** ; Image Processing; Internet Utilities
    ; Java; **Streaming** Media

12/5/8

00107929   DOCUMENT TYPE: Review

PRODUCT NAMES: Microsoft Windows NetMeeting (622648.)

TITLE: Ahead of the Curve
AUTHOR: Koreto, Richard J
SOURCE: Journal of Accountancy,   v185 n2 p93(3) Feb 1998
ISSN: 0021-8448
HOMEPAGE: http://www.aicpa.org

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Microsoft's Microsoft NetMeeting, a free, real- **time** voice and
videoconferencing product, supports videoconferencing via the Internet. K2
Enterprises, an accounting practice with four partners who practice in
various locations requiring travel, use NetMeeting to conference. The firm
has saved 40 percent of its former phone bill by videoconferencing over the
Internet with NetMeeting. This is an example of K2 Enterprise's extensive
use of the Internet to enable and **streamline** communications and other
tasks while reducing costs. K2 Enterprises gives a full-day seminar on
business use of the Internet, a service that draws considerable attention
to K2's own Web site. K2 **requests** attendees of its Internet seminars to
consider long and hard what they want their Web sites to do. For instance,
will the site be a basic Yellow Page list? or will it provide corporate,
product, sales, **distribution** , and service information or other
activities? K2 tells attendees to **keep** graphics simple to speed page
loading. Web pages should also include photographs of key staff, to allow a
Web site visitor to match the face of a real person with one on the Web
site. K2's site has a page that describes the accountancy in terms of its
people, so that K2 can 'make every effort to maintain a high level of
integrity, family values, and friendship among all involved.'

COMPANY NAME: Microsoft Corp (112127)
SPECIAL FEATURE: Charts Screen Layouts
DESCRIPTORS: Accountants; Groupware; IBM **PC** & Compatibles; Internet
    Utilities; Meetings & Conventions; Videoconferencing
REVISION DATE: 20030527

12/5/9

00106857   DOCUMENT TYPE: Review

PRODUCT NAMES: Media 100 xr 4.0 with HDRfx   (365602)

TITLE: Media 100 xr, v4.0 with HDRfx
AUTHOR: Hanish, Michael
SOURCE: Digital Video Magazine,   v6 n1 p65(2) Jan 1998
ISSN: 1075-251X
HOMEPAGE: http://www.dv.com

RECORD TYPE: Review
REVIEW TYPE: Review
GRADE: A

Media 100's Media 100 xr 4.0 with HDRfx, a nonlinear editing system, is a

new entry to the high end of the Media 100 line of nonlinear editing systems. It provides dual- **stream** video and an uncompressed alpha-channel for real-time (with no rendering) dissolve and wipe transitions, color and motion effects, and audio crossfades at full online quality. **Users** considering purchasing the system should review Media 100's World Wide Web site because requirements for the system are rigid and necessary. Media 100's editing software is provided. Changes in this release are many and integral. A consolidated codec is more stable, **memory** management has been rewritten, and speed and stability are enhanced throughout. **Users** can **apply** ColorFX to more than one clip in the timeline, and an extended set of support for EDL import and export is provided. The board and software allow **users** to show and process two **video** **streams** **concurrently** with quality of 300KB/frame for NTSC or 360KB/frame for PAL systems. Among things **users** can do are the ability to drop three clips in the timeline and overlap them; add disparate HDRfx-provided transitions; speed two clips up by 50 percent and slow another by 75 percent; and tint one pale blue, posterize another, and invert colors in the third. Static titles can be added to span transitions, and the audio can be option-dragged to overlap and crossfade clips.

PRICE: $19995

COMPANY NAME: Media 100 Inc   (624853)
SPECIAL FEATURE: Charts Screen Layouts
DESCRIPTORS: Digital Video; Graphics Tools; Image Processing
REVISION DATE: 20010730

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00106042   DOCUMENT TYPE: Review

PRODUCT NAMES: Conference Server (106682); Microsoft Windows NetMeeting (622648); LiveLAN (534927); StarWorks (420204); StarCast (686336)

TITLE: Network-Based Video
AUTHOR: Zeichick, Alan
SOURCE: Network,   v12 n13 p63(4) Dec 1997
ISSN: 1093-8001

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

White Pine Software's CU-SeeMe, Microsoft's Microsoft NetMeeting, PictureTel's LiveLAN, and Starlight Networks' StarWorks and StarCast are products highlighted in a discussion of full-motion, network-based video for the desktop. Video is either **transmitted** in real- **time** , during which the **video** source is created as it is seen, or as **streaming** video, also called on- **demand** video; the latter uses prerecorded clips or other video sources that are **stored** on a server and fetched by an end- **user** application, such as a World Wide Web browser plug-in or a dedicated video **client** . Video also can be **generated** by input from a CCD-based digital camera, or a slide show presentation can be **captured** , with a voice overlay added, and saved to a file. CU-SeeMe measures windows using a fraction of a 640-pixel x 480-pixel screen, including a quarter screen or a 16th screen. NetMeeting and LiveLAN use the Common Intermediate Format (CIF), also called FCIF (FUll CIF), which defines a 352-pixel x 288-pixel window. Network-based video servers include StarWorks 3.2, which **streams** video at 150Mbits/sec from Windows NT Server. The **user** gains access to the system via a World Wide Web browser with a StarWorks plug-in, while StarCast provide IP Multicast for Multimedia from analog or digital sources. Both products employ MPEG-1 and Indeo formats. Other topics covered include advanced video and codecs, asynchronous **transfer** mode, and Internet Protocol (IP).

COMPANY NAME: First Virtual Communications (665606); Microsoft Corp
     (112127); PictureTel Corp (482641); Starlight Networks Inc (547883)
SPECIAL FEATURE: Tables
DESCRIPTORS: Conferencing; IBM **PC** & Compatibles; Internet Utilities;
     Network Software; **Streaming** Media; Videoconferencing; Windows NT/2000
REVISION DATE: 20030527

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DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00103647   DOCUMENT TYPE: Review

**PRODUCT NAMES: Meridian Messenger (586374); Intuity Message Manager
(564451); Intuity Multimedia Messaging Server (673293); CallXpress
(471976); TeLANophy (462713)**

TITLE: Integrated Messaging Today
AUTHOR: Steinke, Steve
SOURCE: Network,   v12 n9   p44(6) Sep 1997
ISSN: 1093-8001

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Northern Telecom's (Nortel's) Meridian Messenger, Lucent's Intuity Message
Manager and Intuity Multimedia Messaging Server, Applied Voice Technology's
CallXPress3, and Active Voice's TeLANophy are products highlighted in a
discussion of the move toward integrated voice and fax messaging on today's
computer networks. Operation of private branch exchanges (PBXs) and voice
mail is explored to allow **users** to better understand issues to be
addressed when integrating their functions to **PC** networks, or when making
them interoperate transparently with networks. Fax and other telephony
services are also discussed. PBXs act as circuit switches to provide routes
for real- **time** **audio** sessions between a microphone at one end of a
session, and a loudspeaker at the other. The PBX does digital-to-analog
conversion on calls originating in the public phone network before **sending**
 calls to local destinations. Voice mail systems are automated terminals,
or phones that record messages and **store** them in an organized way for
playback on **demand** . Some solutions, including Octel's Visual Mailbox,
provide separate desktop computer **clients** for voice mail, while others,
including Meridian Messenger and Intuity Message Manager, provide **clients**
that show e-mail, fax messages, and voice in one display and a single
application. **Users** can choose either proprietary or open architectures.

COMPANY NAME: Northern Telecom (471631); Lucent Technologies (586072);
     Captaris (567701); Active Voice Inc (491721)
SPECIAL FEATURE: Charts Screen Layouts
DESCRIPTORS: Computer Telephony; E-Mail; Fax Software; LANs; Network
     Software; Office Automation; Telecommunications; Telephone Messages;
     Unified Messaging; Voice Mail
REVISION DATE: 20011130

12/5/12
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00101048   DOCUMENT TYPE: Review

PRODUCT NAMES: Distributed **Processing (830192**

TITLE: A New Foundation
AUTHOR: Ozsu, M Tamer

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Distributed database technology must benefit from faster networks,
wireless access, and multimedia to provide **users** with individual data
views. Many database vendors have technologies that may soon provide
genuine **distribution** during the development cycle. **Client** /server
systems are still the preferred solutions, but they are much more advanced
than they were in 1992. For instance, today's C/S systems are more
unobtrusive in the way they gain access to data from multiple servers, and
they support **distributed** transactions to ease seamless operation and can
perform **queries** over horizontally fragmented data. The requirements of
newer, **distributed** applications mean new challenges and opportunities for
the database industry. Newer systems manage **distributed** data with more
versatility and efficiency, but to support more complex applications and
queries over the Internet, new DBMS products will have to account for the
time dependency of **audio** / **video** data **streaming** to deliver multimedia.
Communication between **client** and server has to be tuned to meet real-time
synchronization needs, or the server interface of systems has to allow
synchronization routines to gain access to multimedia objects at the server
buffer. As for modeling, more advanced models are needed to **capture**
application objects. Object DBMSs provide the most promising technology,
but they still have to become more full-functioned and scalable, and their
performance has to improve.

COMPANY NAME: Vendor Independent (999999)
DESCRIPTORS: **Client** /server; Database Management; **Distributed**
    Processing; Multimedia; Network Software; Wireless Networks
REVISION DATE: 19971030

12/5/13
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00099033 DOCUMENT TYPE: Review

PRODUCT NAMES: StoryBuilder (643866)

TITLE: Media Web sites struggle to meet demand
AUTHOR: Wagner, Mitch
SOURCE: Computerworld, v31 n5 p57(2) Feb 3, 1997
ISSN: 0010-4841
HOMEPAGE: http://www.computerworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Vignette's StoryBuilder will be used by **Time** New **Media** (TNM) as a way
to put news out faster on TNM's Pathfinder World Wide Web site. TNM is
looking for effective ways to process hundreds of thousands of hits each
day, and will use StoryBuilder on the Netly News site, which provides daily
news about the Internet and its **users** to subscribers. The larger goal is
to **keep** content and formatting separate, so that the site can remain
scalable and easy to manage. StoryBuilder is designed to provide the
benefits of static pages coded in Hypertext Markup Language (HTML) and
dynamic pages built on the fly from an information database. Web servers
that deliver database information allow corporate **users** to include more
and more current information than is possible with static Web pages. Such
servers allow content to be modified or added using prewritten HTML
templates. The pages are slower to reach because they are compiled from the

database each time **users** **request** them. StoryBuilder improves on this
scenario by compiling popular pages only once and **storing** them as static
pages on a hard-disk **cache** . Other large sites, including those from 'The
New York Times' and ` **Playboy** ' use multiple servers that run server
software from Netscape Communications and Microsoft.

PRICE: $9500

COMPANY NAME: Vignette Corp   (622141)
SPECIAL FEATURE: Screen Layouts
DESCRIPTORS: Authoring Systems; Electronic **Publishing** ; Information
     Retrieval; Internet Utilities; Magazine **Publishers** ; News Services;
     Publishing ; Web Site Design
REVISION DATE: 20020819

12/5/14
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00098567   DOCUMENT TYPE: Review

PRODUCT NAMES: ObjectStore   (269956)

TITLE: Object database serves up news
AUTHOR: Leon, Mark
SOURCE: InfoWorld,   v18 n50 p14(1) Dec 9, 1996
ISSN: 0199-6649
HOMEPAGE: http://www.infoworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Object Design's ObjectStore is part of a solution devised by **Time**
-Warner's New **Media** to support **publishing** of its World Wide Web
newspaper, Personal Edition. Time-Warner rejected relational and
object-relational technology, and selected ObjectStore because it allows
them to choose specific content and have the application add keyword
searches in real time against all the stories. The ObjectStore object
database is innately suitable for **storing** direct links to content in
various locations. Long **queries** and table joins are eliminated, so **users**
 get quick, personalized news online. The Personal Edition newspaper, which
allows **users** to create a personal newspaper, is available to **users** from
the Pathfinder Web site, and provides access to stories from such sources
as Reuters, The Associated Press, 'Tass', 'Sports Illustrated', and 'Time'.
Time-Warner's selection of Open Data Link Interface technology indicates
that the Web could be the 'killer app' for object databases. ObjectStore
does not hold content; rather, stories and graphics in Hypertext Markup
Language (HTML) files are **stored** in the file system, and ObjectStore uses
metadata technology to track connections between **users** ' personal
preferences and stories used to create customized content. Analysts say an
unadulterated object database can offer better performance for applications
in which there are multiple relationships among data blocks.

COMPANY NAME: Progress Co   (436461)
SPECIAL FEATURE: Charts
DESCRIPTORS: Alerts; Content Providers; Electronic **Publishing** ;
     Information Retrieval; Internet Utilities; News Services; Newspapers;
     Publishing
REVISION DATE: 20030130

12/5/15
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00096515   DOCUMENT TYPE: Review

PRODUCT NAMES: Hybrid Media   (836923)

TITLE: 'I've Seen the Future, and It's Hybrid'
AUTHOR: Haight, Tim
SOURCE: NetGuide,   v3 n10 p168(2) Oct 1996

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Hybrid media applications merge delivery channels and mix them in an
invisibly combined **user** experience to provide multimedia content plus
network interactivity. The **user** 's desktop machine creates the **user**
experience, which appears to be delivered live. Therefore, **users** need not
wait for more bandwidth before enjoying interactive multimedia on the
desktop. Delivery is via mixed **media** ; for example, real- **time**
information can be combined with CD-ROM- **stored** content, as many game
vendors are already doing. Content can also be downloaded from the Internet
overnight, **stored** on the hard disk, and replayed, possibly combined with
real-time content, the following day. Content can also be downloaded from a
satellite, which **transmits** via **broadcast** for bandwidth optimization;
this content can be combined with a telephone uplink or CD-ROM-based
content. Web pages can be embedded in an over-the-air TV signal and
combined with **broadcast** video on an appropriately equipped computer. For
economic reasons, hybrid media is likely to be the future overall trend of
the Web. Many unanswered **questions** remain.

COMPANY NAME: Vendor Independent   (999999)
DESCRIPTORS: CD-ROMs; Electronic **Publishing** ; Hybrid Media; Information
    Retrieval; Internet; Multimedia
REVISION DATE: 20000630

12/5/16
DIALOG(R)File 256:SoftBase:Reviews,Companies&Prods.
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00094258   DOCUMENT TYPE: Review

PRODUCT NAMES: ObjectStore   (269956)

TITLE: Object databases lag
AUTHOR: Stedman, Craig
SOURCE: Computerworld,   v30 n34 p43(1) Aug 19, 1996
ISSN: 0010-4841
HOMEPAGE: http://www.computerworld.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

Object Design's ObjectStore, used by **Time** 's New **Media** unit, is part of
a personalized news service that will become available in Fall 1996 on
Time's Pathfinder World Wide Web site. A prototype done on Sybase's RDBMS
was not satisfactory because of too much overhead and slow performance.
RDBMSs **store** data in tables, and the tables must be joined to answer
elaborate **queries** . Object databases like ObjectStore, Versant ODBMS,
GemStone, Objectivity/DB, Poet, and Ontos DB/Explorer allow **users** to link
complex data structures as more easily accessed objects; object-based
software also processes multimedia data, including video and audio, while
RDBMSs generally **store** only records made up of numbers and characters.
While object databases are generally used only for specialized
applications, some vendors hope the Internet will provide a way for object
databases to become more widely used.

COMPANY NAME: Progress Co (436461)
SPECIAL FEATURE: Charts Graphs
DESCRIPTORS: Database Management; Electronic **Publishing** ; Internet
    Utilities; News Services; OOP (Object Oriented Programming); Program
    Development
REVISION DATE: 20030130

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Set    Items    Description
S1    1121876    CLIENT? OR VIEWER? OR USER? OR STANDALONE OR STAND()ALONE -
                 OR PC OR PCS OR PERSONAL()COMPUTER? OR WORKSTATION? OR WORK()-
                 STATION? OR NODE?
S2    1271294    REQUEST? OR ASK OR ASKS OR ASKED OR ASKING OR PETITION? OR
                 CALL()(ON OR UPON) OR QUER? OR QUESTION? OR INQUIR? OR DEMAND?
                 OR REQUISITION OR APPLY OR APPLYING
S3     904954    CAPTUR? OR MEMORY OR CACHE? OR STORE? ? OR STORING OR SAVE
                 OR SAVING OR KEEP? ? OR KEEPING
S4     701532    (TV OR TELEVISION OR RADIO)()(SHOW? OR PROGRAM? OR BROADCA-
                 ST?) OR MEDIA()ASSET? OR VIDEO? OR AUDIO? OR MULTIMEDIA OR ME-
                 DIA
S5    3677712    TIME OR SCHEDULE? OR PERIOD OR DURATION OR SIMULTANEOUS? OR
                 CONCURRENT?
S6     200307    ENCOD??? OR DECOD??? OR ENCRYPT??? OR CIPHER? OR CYPHER? OR
                 DECRYPT? OR CYPHERTEXT OR ENCYPHER? OR UNCOD? OR UNENCRYPT? -
                 OR ENCIPHER? OR UNCOD? OR DECIHER? OR UNCYPHER? OR UNCYPHER? -
                 OR CYPTO?
S7    2404301    PUBLISH? OR ISSUE OR DISPURS? OR DISTRIBUT?
S8    2534603    DIFFERENT OR ANOTHER OR SEPARATE OR TARGET
S9    3798570    TRANSFER? OR STREAM? OR SEND? OR TRANSMIT? OR TRANSMISSION
                 OR GENERAT? OR PLAY? OR BROADCAST?
S10       281    S1 AND S2 AND S3 AND (S4 (3N) S5)
S11   5714238    S7 OR S9
S12     49081    S8 (3N) S5
S13     16903    S11 AND S12
S14         4    S10 AND S13
S15        21    S10 AND S6
S16         0    S15 AND S12
S17        20    S15 AND S11
S18        25    S14 OR S15 OR S17
S19        14    S18 NOT PY>1999
S20        14    S19 NOT PD>19990211
S21        12    RD (unique items)
S22      2704    S1 AND S2 AND S3 AND S4
S23        19    S22 AND S13
S24        12    S23 NOT PY>1999
S25        11    S24 NOT PD>19990211
S26         6    RD (unique items)
File   8:Ei Compendex(R) 1970-2003/May W4
          (c) 2003 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2003/May
          (c) 2003 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2003/May 14
          (c) Information Today, Inc
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          (c) 2003 Info. Today Inc.
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          (c)2003 Japan Science and Tech Corp(JST)
File  99:Wilson Appl. Sci & Tech Abs 1983-2003/Apr
          (c) 2003 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2003/May W3
          (c) 2003 FIZ TECHNIK
```

21/5/1   (Item 1 from file: 8)

05811811   E.I. No: EIP01204959160
  Title: **Zero-delay** broadcasting **protocols for video-on-** demand
  Author: Paris, Jehan-Francois; Long, Darrell D.E.; Mantey, Patrick E.
  Corporate Source: Univ of Houston, Houston, TX, United States
  Conference Title: Proceedings of the 1999 7th International Multimedia
Conference - ACM MULTIMEDIA '99
  Conference   Location: Orlando,   FL,   USA   Conference   Date:
19991030-19991105
  Sponsor: ACM
  E.I. Conference No.: 56197
  Source: Proceedings   of the   ACM   International Multimedia Conference &
Exhibition 1999. ACM, New York, NY, United States
  Publication Year: 1999
  CODEN: 002179
  Language: English
  Document Type: CA; (Conference Article)   Treatment: A; (Applications); G
; (General Review)
  Journal Announcement: 0105W2
  Abstract: **Broadcasting** protocols for video-on- **demand** continuously
retransmit   **videos** that are watched **simultaneously** by many **viewers** .
Nearly all   **broadcasting** protocols assume that the **client** set-top box
has enough storage to **store** between 48 and 60 minutes of video. We
propose to use this storage to anticipate the customer **requests** and to
preload, say, the first 3 minutes of the top 16 to 20 videos. This would
provide instantaneous access to these videos and also eliminate the extra
bandwidth required to handle compressed video signal. We present two
broadcasting protocols using partial preloading to eliminate this extra
bandwidth. The first of these protocols, Polyharmonic **Broadcasting** with
Partial Preloading (PHB-PP), partitions each video into between 20 and 160
segments of equal   **duration** and allocates a **separate** data **stream** to
each individual segment. Our second protocol, the Mayan Temple
Broadcasting protocol, uses fewer data **streams** but requires more
overall bandwidth. (Author abstract) 14 Refs.
  Descriptors: Multimedia systems; Video on **demand** ; Network protocols;
Television **broadcasting** ; Video signal processing; Bandwidth; Image
compression; Image segmentation
  Identifiers: Zero-delay **broadcasting** protocols; Pyramid **broadcasting**
  Classification Codes:
  723.5 (Computer Applications); 716.4 (Television Systems & Equipment);
716.1 (Information & Communication Theory); 723.2 (Data Processing)
  723 (Computer Software, Data Handling & Applications); 716 (Electronic
Equipment, Radar, Radio & Television)
  72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATION
ENGINEERING)

21/5/2   (Item 2 from file: 8)

05299660   E.I. No: EIP99064699045
  Title: **Rate control for non-real-** time   video   encoding
  Author: Pao, I.-Ming; Sun, Ming-Ting
  Corporate Source: Univ of Washington, Seattle, WA, USA
  Conference Title: Proceedings of the 1999 Visual Communications and Image
Processing
  Conference   Location: San   Jose,   CA,   USA   Conference   Date:
19990125-19990127
  Sponsor: IS and T; SPIE
  E.I. Conference No.: 55132
  Source: Proceedings   of SPIE   -   The   International Society for Optical
Engineering v 3653 n I 1999. p 509-517
  Publication Year: 1999

Abstract: In **streaming** video applications, video sequences are **encoded**
off-line and **stored** in a server. **Users** may access the server over a
constant bit-rate channel such as Public Switched Telephone Network (PSTN)
or Integrated Service Digital Network (ISDN). Examples of the **streaming**
video are video on **demand** , archived video news, and non-interactive
distance learning. Before the **playback** , part of the video bit- **stream** is
pre-loaded in the **decoder** buffer to ensure that every frame can be
decoded at the scheduled **time** . For these **streaming** video
applications, since the delay (latency) is not a critical **issue** and the
whole video sequence is available to the **encoder** , a more sophisticated
bit-allocation scheme can be used to achieve better video quality. During
the **encoding** process for **streaming** video, two constraints need to be
considered: the maximum pre-loading **time** that the **video** **viewers** are
willing to accept and the physical buffer-size at the receiver (**decoder**)
side. In this paper, we propose a rate-control scheme that uses statistical
information of the whole video sequence as a guidance to **generate** better
video quality for video **streaming** involving constant bit-rate channels.
Simulation results show video quality improvements over the regular H.263
TMN8 **encoder** . (Author abstract) 15 Refs.
   Descriptors: *Image coding; Video signal processing; Statistical methods;
Image quality; Computer simulation; Signal to noise ratio
   Identifiers: Rate control; Video **streaming**
   Classification Codes:
   723.2   (Data Processing); 716.4   (Television Systems & Equipment); 922.2
(Mathematical Statistics); 723.5   (Computer Applications)
   741   (Optics & Optical Devices); 723   (Computer Software); 716   (Radar,
Radio & TV Electronic Equipment); 922   (Statistical Methods)
   74   (OPTICAL TECHNOLOGY); 72   (COMPUTERS & DATA PROCESSING); 71
(ELECTRONICS & COMMUNICATIONS); 92   (ENGINEERING MATHEMATICS)

21/5/3   (Item 3 from file: 8)

04688554   E.I. No: EIP97053640076
   Title: **Real-time vector quantization-based image compression on the
SIMPil low** memory **SIMD architecture**
   Author: Gentile, Antonio; Cat, Huy; Kossentini, Faouzi; Sorbello, Filippo
; Wills, D. Scott
   Corporate Source: Georgia Inst of Technology, Atlanta, GA, USA
   Conference   Title: Proceedings of the 1997 IEEE International Performance
Computing & Communications Conference
   Conference   Location: Phoenix,   AZ,   USA   Conference   Date:
19970205-19970207
   Sponsor: IEEE
   E.I. Conference No.: 46342
   Source: IEEE   International   Performance,   Computing   &   Communications
Conference, Proceedings 1997. IEEE, Piscataway, NJ, USA,97CH36051. p 10-16
   Publication Year: 1997
   CODEN: 002588
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 9706W4
   Abstract: Vector quantization (VQ) has become a popular technique for
image compression. While conventional unstructured VQs have the potential
of achieving the best theoretical performance, they are also **demanding** in
storage and computational requirements. A significant amount of current
research on VQ implementations addresses increasing the speed of image
encoding , which is one of the most computationally expensive operations.
This is typically accomplished by imposing structures, exploiting
properties of the distance measure, or developing efficient and fast
implementations. This paper proposes a parallel implementation of a

full-search VQ **encoding** algorithm using a low **memory** , fine grain single instruction **stream** multiple data **stream** (SIMD) pixel processor (SIMPil) being developed at Georgia Tech. This implementation fully exposes the available parallelism of the **encoding** process and exploits the processing and I/O capabilities of the processor, resulting in a system that can perform real- **time** image and **video** compression. The proposed implementation **encodes** a large region of the original image at once, replacing each constituent input block with its corresponding VQ codeword index. Preliminary simulation results indicate that the proposed implementation is capable of sustain real-time frame rates. A prototype single **node** SIMPil implementation has been fabricated by MOSIS in 0.8 mu m CMOS, and is being evaluated. (Author abstract) 17 Refs.

Descriptors: *Vector quantization; Real time systems; Parallel algorithms ; Computer simulation; Image coding; Digital image storage; CMOS integrated circuits; Data structures; Microprocessor chips

Identifiers: Single instruction **stream** multiple data **streams** (SIMD); SIMD pixel processors (SIMPil)

Classification Codes:

921.1 (Algebra); 723.2 (Data Processing); 722.4 (Digital Computers & Systems); 722.1 (Data Storage, Equipment & Techniques)

921 (Applied Mathematics); 723 (Computer Software); 722 (Computer Hardware)

92 (ENGINEERING MATHEMATICS); 72 (COMPUTERS & DATA PROCESSING)

21/5/4   (Item 4 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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03008500   E.I. Monthly No: EI9101010835
Title: Real- time   video **data compression system.**
Author: Frost, T. M. E.; Theaker, C. J.
Corporate Source: Univ of Manchester Inst of Science and Technology, Manchester, Engl
Source: IEE Proceedings, Part E: Computers and Digital Techniques v 137 n 5 Sep 1990 p 337-342
Publication Year: 1990
CODEN: IPETD3   ISSN: 0143-7062
Language: English
Document Type: JA; (Journal Article)   Treatment: X; (Experimental)
Journal Announcement: 9101
Abstract: The paper describes a system for **capturing** and compressing **video** data in real **time** . It has principally been used for recording activity on the screen of computer **workstations** . Its main application has been in evaluating the useability of computer based products from a human factors point of view, as it allows the replay of screen displays with the same high fidelity as the original computer system. The displays are **captured** in digital form, and owing to the capacity and speed of digital storage media, it is necessary to **apply** significant data compression during the recording phase. The paper examines the degree of data compression necessary to be able to handle typical computer **workstations** . Some of the known techniques of data reduction are outlined, and a practical data compression system described. (Author abstract) 14 Refs.

Descriptors: VIDEO RECORDING; INFORMATION THEORY--Data Compression; IMAGE PROCESSING--Image Coding; COMPUTER **WORKSTATIONS**

Identifiers: VIDEO DATA COMPRESSION; QUANTIZATION ERROR; **ENCODING** SPEED ; FIFO BUFFER

Classification Codes:

716 (Radar, Radio & TV Electronic Equipment); 731 (Automatic Control Principles); 723 (Computer Software)

71 (ELECTRONICS & COMMUNICATIONS); 73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

21/5/5   (Item 1 from file: 35)
DIALOG(R)File   35:Dissertation Abs Online
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01730935 ORDER NO: AADAA-I9958074
On managing continuous media data
  Author: Chang, Edward Yjhuei
  Degree: Ph.D.
  Year: 1999
  Corporate Source/Institution: Stanford University (0212)
  Adviser: Hector Garcia-Molina
  Source: VOLUME 61/01-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
      PAGE 359. 170 PAGES
  Descriptors: COMPUTER SCIENCE ; ENGINEERING, ELECTRONICS AND ELECTRICAL
  Descriptor Codes: 0984; 0544

    To deliver a large volume of continuous media data (i.e., video and
audio) from a media server to a large number of simultaneous **clients**
poses at least three challenges. First, the resources at the server side
must be carefully allocated and scheduled to maximize throughput. Second,
the server must deliver the data to the **client** just-in- **time** so that the
media data in the **client** 's buffer neither overflows nor underflows.
Third, the latency between the time when the data is **requested** and when
the data is available for the **client** to **decode** and **playback** must be
short to support interactive multimedia applications. To address these
challenges, the conventional wisdom alms to minimize latency and maximize
the utilization of the server's disk. My thesis addresses these challenges
in three novel ways. First, contrary to the conventional wisdom, I show
that spacing out IOs with delay may in fact lead to higher throughput,
since **memory** , rather than disk, is the resource bottleneck of the media
server. I show how to use **memory** judiciously and how to minimize the per-
stream cost so that the throughput can be maximized. Second, I propose
intelligent data placement and disk scheduling policies to minimize the
initial latency of media data delivery. My analytical model shows that my
schemes can bring the worst-case initial latency down to just a fraction of
a second. I also **apply** these techniques to manage parallel disks
efficiently. Finally, I design and implement a **client** side **MEmory** and
Disk Integrated **Cache** (MEDIC), which buffers the variability of the data
delivery (due to VBR and potential channel disturbances) and supports
time-shift VCR operations at the **client** side using the local disk.
Through quantitative analysis, simulation and implementation, my work
demonstrates that a smart media **client** using MEDIC complements a good
media server design and that together they provide a complete end-to-end
solution for managing continuous media data.

 21/5/6   (Item 2 from file: 35)
DIALOG(R) File 35:Dissertation Abs Online
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01506010 ORDER NO: AADMM-07838
IMPLEMENTATION AND PERFORMANCE ANALYSIS OF A MULTIMEDIA SYNCHRONIZER
  Author: BRIMONT, RENAUD MARCEL
  Degree: M.A.SC.
  Year: 1995
  Corporate Source/Institution: UNIVERSITY OF OTTAWA (CANADA) (0918)
  Adviser: NICOLAS D. GEORGANAS
  Source: VOLUME 34/05 of MASTERS ABSTRACTS.
      PAGE 2018. 128 PAGES
  Descriptors: ENGINEERING, ELECTRONICS AND ELECTRICAL
  Descriptor Codes: 0544
  ISBN: 0-612-07838-8

    Synchronization is a crucial problem for **distributed** multimedia
systems and has been the subject of a great many research investigations at
all levels of a multimedia system, and on several of their components
concerned with the **issue** of synchronization: the databases, the
communication system, the operating system, the documents, applications
themselves. Indeed, in the case of multimedia presentational applications,
an efficient management of communication resources and the eventuality of

. having the data of different media types **stored** on **distributed** media-**storing** database servers requires the use of independent network connections for the **transmission** of each medium to a remote **workstation**

.

In this thesis, the implementation of a complete software synchronization control system for presentational application is described. In the target application--a News on **Demand** Application--a **user** wants to retrieve a multimedia document from a **distributed** database. Each medium present in the article is **stored** independently from the others and retrieved by its own media server. The synchronization among the media is achieved in two steps. Using a pre-defined scenario and QoS guarantees supported by ATM based virtual connections, a delivery schedule is derived and passed to each server, so that they can **transmit** the appropriate **media** subjects at the **scheduled** times, compensating for the delays and delay variations introduced by the network, and eventually the **decoders** . Additionally the **Stream** Synchronization Protocol (SSP) performs ' ' rescheduling operations at the **client** site to recover from jitters on the network and provide the **user** with a better and more acceptable service. The various components (database, **client** application, graphical interface) of this system, their software modules, and their interactions are described thoroughly. (Abstract shortened by UMI.)

Sychronization is considered as a key **issue** in **distributed** multimedia systems. In a real- **time** **multimedia** presentation, data objects of different media types or coding formats are delivered from **distributed** media- **storing** servers to the remote **client** simultaneously over high-speed networks. The multiple **streams** need to be synchronized so that the multimedia document can be presented in the way specified by its creator. The synchronization research involves issues such as temporal relationship modeling, extending network protocols and supporting the implementation of applications where the synchronization control mechanisms integrate with other system functionality, such as the ATM network transmissions. The video coding/ **decoding** and the **distributed** database management.
   In this thesis, we investigate a software synchronization control system for a target presentational application, i.e., a Multimedia News-on-**demand** service. Relying on the Quality of Services (QoS) supported by the ATM-based virtual connections, the system prevents major multi- **stream** mismatches through a delivery scheduling operation. Moreover, the synchronization errors brought by the inevitable network delay variations are recovered through a **Stream** Synchronization Protocol (SSP) in order to preserve the presentation quality. We **apply** the Time Flow Graph (TFG) to model the temporal relationships among the media components so that the scheduling and recovering operations can be efficient. Synchronization QoS parameters are employed in the SSP control. In addition, the differences between the characterization of coded and **uncoded** data **streams** are taken into account. We present a priority-based synchronization control for coded data, e.g., the MPEG-2 video **stream** .

For the implementation of such a control system, we elaborate a set of data structure specifications and algorithms. As well, we develop the software modules to implement the synchronization control prototype.

21/5/8   (Item 1 from file: 2)

6404739   INSPEC Abstract Number: B1999-12-6135C-162, C1999-12-5260D-105
  Title: Rate control for non-real- time   video   encoding
  Author(s): I-Ming Pao; Ming-Ting Sun
  Author Affiliation: Dept. of Electr. Eng., Washington Univ., Seattle, WA,
USA
  Journal: Proceedings of the SPIE - The International Society for ·Optical
Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)
vol.3653, pt.1-2   p.509-17
  Conference Title: Visual Communications and Image Processing '99
  Conference Sponsor: SPIE; Soc. Imaging Sci. & Technol
  Conference Date: 25-27 Jan. 1999   Conference Location: San Jose, CA,
USA
  Language: English   Document Type: Conference Paper (PA); Journal Paper
(JP)
  Treatment: Applications (A); Practical (P); Theoretical (T); Experimental
(X)
  Abstract: In **streaming** video applications, video sequences are **encoded**
off-line and   **stored**   in a server. **Users** may access the server over a
constant bit-rate channel such as public switched telephone network (PSTN)
or integrated service digital network (ISDN). Examples of the **streaming**
 video are video on   **demand** , archived video news, and noninteractive
distance learning. Before the **playback** , part of the video bit- **stream** is
pre-loaded in the   **decoder** buffer to ensure that every frame can be
 decoded   at   the scheduled   **time** . For these   **streaming**   **video**
applications, since the delay (latency) is not a critical **issue** and the
whole video sequence is available to the **encoder** , a more sophisticated
bit-allocation scheme can be used to achieve better video quality. During
the   **encoding**   process for **streaming** video, two constraints need to be
considered: the maximum pre-loading **time** that the **video**   **viewers** are
willing to accept and the physical buffer-size at the receiver (**decoder**)
side. In this paper, we propose a rate-control scheme that uses statistical
information of the whole video sequence as a guide to **generate** better
video quality for video **streaming** involving constant bit-rate channels.
Simulation results show video quality improvements over the regular H.263
TMN8 **encoder** .   (15 Refs)
  Subfile: B C
  Descriptors: **decoding** ; distance learning; image sequences; ISDN; video
coding; video on **demand**
  Identifiers: nonrealtime video **encoding** ; **streaming** video applications
; video sequences; constant bit-rate channel; public switched telephone
network; integrated service digital network; video on **demand** ; archived
video news; noninteractive distance learning; video bit- **stream** ; **decoder**
buffer; bit-allocation scheme; video quality; maximum pre-loading time;
rate-control scheme; statistical information
  Class Codes: B6135C (Image and video coding); B0120 (Education and
training); B6430G (Video on demand and video servers); B6210M (ISDN);
C5260D (Video signal processing); C7810C (Computer-aided instruction)

21/5/9   (Item 2 from file: 2)

6038054   INSPEC Abstract Number: B9811-6140C-176, C9811-5260B-136
   Title: **A quick scene classification method based on compact** encoding **of video feature sequence**
   Author(s): Nagasaka, A.; Miyatake, T.
   Author Affiliation: Central Res. Lab., Hitachi Ltd., Kokubunji, Japan
   Abstract: We propose a real- **time** **video** scene classification method that memorizes features of continuously input **videos** **simultaneously** with detecting all the same scenes in the already input videos as the latest free-length scene. This method compresses the feature sequence of the videos in the average size of less than 20 bytes per second to memorize the features for a long time. And it takes less than 30 milliseconds on an average by a typical **personal** **computer** system to process one newly input frame image even though the computer **stores** the last 24-hour video features. Experiments **applying** to television **broadcast** showed that this method find correct pairs of the same scenes in realtime without detection miss. (11 Refs)
   Subfile: B C
   Descriptors: data compression; feature extraction; image classification; real-time systems; video coding
   Identifiers: quick scene classification method; compact **encoding** ; video feature sequence; real- **time** **video** scene classification method; free-length scene; **personal** **computer** system; **PC** ; television **broadcast** ; 20 Byte/s; 30 ms; 24 h
   Class Codes: B6140C (Optical information, image and video signal processing); B6120B (Codes); C5260B (Computer vision and image processing techniques)
   Numerical Indexing: byte rate 2.0E+01 Byte/s; time 3.0E-02 s; time 8.6E+04 s

21/5/10   (Item 3 from file: 2)

5265933   INSPEC Abstract Number: B9606-6430-031, C9606-6150G-045
   Title: **Development of Columbia`s video on** demand **testbed**
   Author(s): Chang, S.-F.; Eleftheriadis, A.; Anastassiou, D.
   Author Affiliation: Dept. of Electr. Eng., Columbia Univ., New York, NY, USA
   Abstract: This paper describes our progress in developing an advanced video-on- **demand** (VOD) testbed, which will accommodate various multimedia research and applications such as electronic news on **demand** , Columbia`s video course network, and digital libraries. Two different prototypes have been completed. The first **generation** of the testbed was based on a constant bit rate (CBR) video server utilizing Ethernet delivery. Contents

were **encoded** and **stored** as MPEG-2 audio/video elementary **streams** . Software **encoders** / **decoders** were used in content **generation** and **playback** . The second **generation** of the testbed was enhanced with the capability of **transmitting** true MPEG-2 transport **streams** over the campus ATM network as well as the wide area NYNET ATM network. A real- **time video** pump and a **distributed** application control protocol (MPEG-2's DSM-CC) have been incorporated. Hardware **decoders** and set-tops are being incorporated to test wide area video interoperability. Our VOD testbed also provides an advanced platform for implementing proof-of-concept prototypes of related research. Our current research focus covers video **transmission** with heterogeneous quality-of-service (QoS) provision, video storage architecture design, content-based video indexing and browsing, multi-resolution (MR) video coding, efficient manipulation of compressed video, and advanced **user** interfaces. An important aim is to enhance interoperability. Accommodation of practical multimedia applications and interoperability testing with external VOD systems are currently being undertaken. (39 Refs)

Subfile: B C
Descriptors: asynchronous **transfer** mode; data compression; digital storage; graphical **user** interfaces; image resolution; information retrieval; interactive television; local area networks; multimedia communication; network servers; open systems; program testing; protocols; test equipment; video codecs; video coding
Identifiers: video on **demand** testbed; Columbia University; multimedia applications; constant bit rate; video server; Ethernet; MPEG-2; software **encoders** / **decoders** ; ATM; wide area network; real- **time video** pump; **distributed** application control protocol; DSM-CC; hardware **decoders** ; quality-of-service; video storage; compressed video; content-based video indexing; video browsing; multi-resolution video coding; **user** interfaces; interoperability
Class Codes: B6430 (Television equipment, systems and applications); B6210R (Multimedia communications); C6150G (Diagnostic, testing, debugging and evaluating systems)
Copyright 1996, IEE

21/5/11   (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2003 FIZ TECHNIK. All rts. reserv.

01366054 19991200030
A novel replica placement strategy for video servers
(Datenreplizierung fuer Videoserver)
Gafsi, J; Biersack, EW
Inst. Eurecom, Sophia Antipolis, F
IDMS 99, Interactive Distributed Multimedia Syst. and Telecommunication Services, 6th International Workshop, Proc., Toulouse, F, Oct 12-15, 1999
Lecture Notes in Computer Science, v1718, n1-3, pp321-335, 1999
Document type: Conference paper Language: English
Record type: Abstract
ISBN: 3-540-66595-1
ISSN: 0302-9743

ABSTRACT:
Mirroring-based reliability as compared to parity-based reliability significantly simplifies the design and the implementation of video servers, since in case of failure mirroring does not require any synchronization of reads or, **decoding** to reconstruct the lost video data. While mirroring doubles the amount of storage volume required, the steep decrease of the cost of magnetic disk storage makes it more and more attractive as a reliability mechanism. In this paper a novel data layout strategy for replicated data on a video server is presented. In contrast to classical replica placement schemes that **store** original and replicated data separately, the approach **stores** replicated data adjacent to original data and thus does not require additional seek overhead when operating with disk failure. It is showed that the approach considerably improves the server performance compared to classical replica placement schemes such as

the interleaved declustering scheme and the scheme used by the Microsoft
Tiger video server. The performance metric is the maximum number of **users**
that a **video** server can **simultaneously** support (server throughput).

DESCRIPTORS: **CLIENT** SERVER SYSTEMS; **DISTRIBUTION** NETWORKS; PERFORMANCE
ANALYSIS
IDENTIFIERS: VIDEO SERVER; Netzwerk-Server; Video-on- **Demand** ;
Leistungsanalyse

21/5/12   (Item 2 from file: 95)
Variable bit rate MPEG video storage on parallel disk arrays
(MPEG-Videospeicherung auf parallelen Platten-Arrays mit variabler Bitrate)
Chang, E; Zakhor, A
Univ. of California, Berkeley, USA

ABSTRACT:
In this paper the authors discuss issues related to the storage and
retrieval of Variable Bit Rate (VBR) MPEG video data on parallel disk
arrays for multiple simultaneous **users** . The authors **store** data blocks
corresponding to constant real-time **playback** duration. Because of the VBR
characteristics and the constant bandwidth read channel, disk overload
occurs at peak usage periods. The strategy to deal with disk overload is to
temporarily stop service to low-priority **users** . To do so, the authors
propose a number of classes of service corresponding to various
probabilities of loss, during which time service is suspended. Thus, a
major problem is estimating probability of loss or suspension so that a
video server system can guarantee service with actual loss probabilities
that do not exceed the specified thresholds at the call setup time. The
authors propose three techniques for computing loss probabilities:
histogramm convolution, Central Limit Theorem, and Cramer's rule. The
authors present an efficient placement strategy and an optimal admissions
control strategy that guarantees loss probability thresholds while
maximizing the number of **requests** that can be satisfied at all qualities.
The authors extend these ideas to encompass scalability by allowing
appropriate frames in the MPEG- **encoded** data to be dropped without fully
suspending service to any one **user** . This allows the system to make
intelligent choices in gracefully degrading the **request** data rates during
periods of peak usage. Finally, the authors test the data placement and
admissions control algorithms with a discrete event disk array system
simulator and show that the results are in accordance with theoretical
predictions.

DESCRIPTORS: DATA STORAGE; DATA COMPRESSION; DATA SIGNALLING RATE; **VIDEO
TRANSMISSION** ; REAL **TIME** METHOD; IMAGE CODING; DATA **MEMORY** ; DATA
ANALYSIS; ALGORITHM; SIMULATORS; EXPERIMENTAL RESULTS; BANDWIDTH--FREQUENCY
; DEVELOPMENTAL TREND; SYSTEM SIMULATION; CONTROL ENGINEERING; IMAGE
RECONSTRUCTION; LOSS PROBABILITY
IDENTIFIERS: Videobild; Datenspeicherungstechnik

26/5/1   (Item 1 from file: 8)

05811811   E.I. No: EIP01204959160
   Title: **Zero-delay** broadcasting **protocols for** video -on- demand
   Author: Paris, Jehan-Francois; Long, Darrell D.E.; Mantey, Patrick E.
   Corporate Source: Univ of Houston, Houston, TX, United States
   Conference Title: Proceedings of the 1999 7th International Multimedia
Conference - ACM MULTIMEDIA '99
   Conference   Location: Orlando,   FL,   USA   Conference   Date:
19991030-19991105
   Sponsor: ACM
   E.I. Conference No.: 56197
   Source: Proceedings of the ACM International Multimedia Conference &
Exhibition 1999. ACM, New York, NY, United States
   Publication Year: 1999
   CODEN: 002179
   Language: English
   Document Type: CA; (Conference Article)   Treatment: A; (Applications); G
; (General Review)
   Journal Announcement: 0105W2
   Abstract: **Broadcasting** protocols for **video** -on- **demand** continuously
retransmit **videos** that are watched simultaneously by many **viewers** .
Nearly all **broadcasting** protocols assume that the **client** set-top box
has enough storage to **store** between 48 and 60 minutes of **video** . We
propose to use this storage to anticipate the customer **requests** and to
preload, say, the first 3 minutes of the top 16 to 20 **videos** . This would
provide instantaneous access to these **videos** and also eliminate the
extra bandwidth required to handle compressed **video** signal. We present
two **broadcasting** protocols using partial preloading to eliminate this
extra bandwidth. The first of these protocols, Polyharmonic **Broadcasting**
with Partial Preloading (PHB-PP), partitions each **video** into between 20
and 160 segments of equal **duration** and allocates a **separate** data
stream to each individual segment. Our second protocol, the Mayan Temple
Broadcasting protocol, uses fewer data **streams** but requires more
overall bandwidth. (Author. abstract) 14 Refs.
   Descriptors: **Multimedia** systems; **Video** on **demand** ; Network protocols
; **Television** **broadcasting** ; **Video** signal processing; Bandwidth; Image
compression; Image segmentation
   Identifiers: Zero-delay **broadcasting** protocols; Pyramid **broadcasting**
   Classification Codes:
   723.5 (Computer Applications); 716.4 (Television Systems & Equipment);
716.1 (Information & Communication Theory); 723.2 (Data Processing)
   723 (Computer Software, Data Handling & Applications); 716 (Electronic
Equipment, Radar, Radio & Television)
   72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATION
ENGINEERING)

26/5/2   (Item 2 from file: 8)

05383336   E.I. No: EIP99104833068
   Title: **Study on scheduling multiple priority** requests in multimedia
servers
   Author: Kamel, Ibrahim; Niranjan, T.
   Corporate Source: Panasonic Information and Networking Technologies Lab,
Princeton, NJ, USA
   Conference Title: Proceedings of the 1999 6th International Conference on
Multimedia Computing and Systems - IEEE ICMCS'99
   Conference Location: Florence, Italy   Conference Date: 19990607-19990611
   Sponsor: IEEE CS; IEEE Circuit and Systems Society
   E.I. Conference No.: 55370
   Source: International Conference on Multimedia Computing and

Systems-Proceedings v 2 1999. p 395-399

Abstract: **Multimedia** servers **store** large amount of **media** data of different format. Different data objects have **different** real **time** requirements. In this paper, we present an empirical study on the performance of disk scheduling in the presence of different **media** type with **different** real- **time** requirements. We also argue that using multiple queues to handle different data types is not the best way to handle objects with different priorities. Moreover we argue that using one queue per disk to organize objects with **different** real **time** requirements would be more suitable for **multimedia** server applications. We built a simulation model based on a real **video** server, PanaViss, produced by Panasonic. The experiments show that using multiple queues respects the priority hierarchy. However, this schema sometime penalizes utilization of the disk. (Author abstract) 15 Refs.

Descriptors: **Client** server computer systems; **Multimedia** systems; Scheduling; Algorithms; Data storage equipment; Queueing networks; Real time systems; Asynchronous **transfer** mode; Computer simulation
Identifiers: **Multimedia** server; Disk scheduling
Classification Codes:
722.4 (Digital Computers & Systems); 723.5 (Computer Applications); 722.1 (Data Storage, Equipment & Techniques); 716.1 (Information & Communication Theory)
722 (Computer Hardware); 723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS)

26/5/3   (Item 3 from file: 8)

Title: **Capacity requirements of** video **servers in** broadcast **television facilities**
Author: Kwong, Ying Ki; Cvetko, John
Corporate Source: Tektronix, Inc, Beaverton, OR, USA

Abstract: Digital **video** servers are rapidly being adopted in **broadcast transmission** facilities where new materials must be **cached** to these servers, usually from tape **media** or, possibly, from **media** in an archival system. To deal with the finite capacity of these servers (usually with hard disk **media**), old materials must be purged. In this process, materials of **different** **time** **duration** are handled. Increasingly, materials with different data rates are also handled because of the use of different compression standards, compression ratio, and (with the advent of digital television (DTV)) different uncompressed data rates and formats. Since the cost of **video** server storage is significant, understanding the time-dependent requirements of server storage capacity is important for system-level planning. A good understanding helps avoid wasteful provisioning of storage capacity without sacrificing operational flexibility. This paper presents a model that should be useful for planning or analyzing capacity requirements of **video** servers. Implications of the model for systems handling primarily long-form materials, such as near-**video** -on- **demand** (NVOD) applications will be examined. (Author abstract) 6 Refs.

Descriptors: **Television** **broadcasting** ; Digital television; **Client** server computer systems; Data compression; **Video** on **demand** ; Bandwidth

Identifiers: Digital **video** servers; Near- **video** -on- **demand** (NVOD)
Classification Codes:
716.4 (Television Systems & Equipment); 722.4 (Digital Computers & Systems); 716.1 (Information & Communication Theory)
716 (Radar, Radio & TV Electronic Equipment); 722 (Computer Hardware)
71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING)

26/5/4   (Item 4 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04343814   E.I. No: EIP96023029299
   Title: **Synchronization of** multimedia **data for a** multimedia **news-on-**
demand **application**
   Author: Lamont, Louise; Li, Lian; Brimont, Renaud; Georganas, Nicolas D.
   Corporate Source: Communications Research Cent, Ottawa, Ont, Can
   Source: IEEE Journal on Selected Areas in Communications v 14 n 1 Jan
1996. p 264-278
   Publication Year: 1996
   CODEN: ISACEM   ISSN: 0733-8716
   Language: English
   Document Type: JA; (Journal Article)   Treatment: A; (Applications)
   Journal Announcement: 9604W1
   Abstract: In this paper, we present a complete software control
architecture for synchronizing multiple data **streams generated** from
distributed media - storing database servers without the use of a global
clock. Independent network connections are set up to remote **workstations**
for **multimedia** presentations. Based on the document scenario and traffic
predictions, **stream** delivery scheduling is performed in a centralized
manner. Certain compensation mechanisms at the receiver are also necessary
due to the presence of random network delays. A **stream** synchronization
protocol (SSP) allows for synchronization recovery, ensuring a high quality
 multimedia display at the receiver. SSP uses synchronization quality of
service parameters to guarantee the **simultaneous** delivery of the
different types of data **streams** . In the proposed architecture, a
priority-based synchronization control mechanism for MPEG-2 coded data
streams is also provided. A performance modeling of the SSP is presented
using the DSPN models. Relevant results such as the effect of the SSP, the
number of synchronization errors, etc., are obtained. (Author abstract) 26
Refs.
   Descriptors: Synchronization; Information services; Data communication
systems; Computer software; Computer architecture; Database systems;
Computer **workstations** ; Telecommunication services; Telecommunication
traffic; Computer simulation
   Identifiers: **Multimedia** ; News on **demand** service; **Stream**
synchronization protocol
   Classification Codes:
   716.1 (Information & Communication Theory); 903.4 (Information
Services); 722.3 (Data Communication, Equipment & Techniques); 723.5
(Computer Applications); 723.3 (Database Systems)
   716 (Radar, Radio & TV Electronic Equipment); 903 (Information Science)
; 722 (Computer Hardware); 723 (Computer Software)
   71 (ELECTRONICS & COMMUNICATIONS); 90 (GENERAL ENGINEERING); 72
(COMPUTERS & DATA PROCESSING)

26/5/5   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04343801   E.I. No: EIP96023029286
   Title: **Synchronization representation and traffic source modeling in**
orchestrated presentation
   Author: Raghavan, S.V.; Prabhakaran, B.; Tripathi, Satish K.
   Corporate Source: Indian Inst of Technology, Madras, India
   Source: IEEE Journal on Selected Areas in Communications v 14 n 1 Jan

1996. p 104-113
Publication Year: 1996
CODEN: ISACEM   ISSN: 0733-8716
Language: English
Document Type: JA; (Journal Article)   Treatment: G; (General Review)
Journal Announcement: 9604W1
Abstract: **Multimedia** applications comprise several **media   streams** ,
which are semantically synchronized at **different   time** instants. The
application behavior is **stored** along with the **multimedia** database using
representation mechanisms such as OCPN (object composition Petri nets) or
dynamic timed Petri nets (DTPN). It is imperative that one translates the
application behavior to the corresponding schedulable entities, such as
packets, so that the performance engineering of any system can be done,
using the traffic model arising out of the (**media** related) application
behavior as opposed to individual **media** level behavior. This requires
that a function be defined, which takes the **stored** temporal
representation as input and produces packets as output, preserving the
semantic relationships among the **streams** . We propose a methodology based
on probabilistic, attributed context free grammar (PACFG) to address this
issue . We demonstrate the appropriateness of this methodology by **applying**
it to the OCPN/DTPN representation of a typical **multimedia** application
vis-a-vis orchestrated presentation. (Author abstract) 14 Refs.
Descriptors: Data communication systems; Synchronization;
Telecommunication traffic; Data structures; Database systems; Petri nets;
Context free grammars; Computer networks; **User** interfaces; Computational
linguistics
Identifiers: Orchestrated **multimedia** ; Object composition Petri nets;
Dynamic timed Petri nets; Schedule entities; Semantic relationships;
Probabilistic attributed context free grammar
Classification Codes:
722.3 (Data Communication, Equipment & Techniques); 716.1 (Information
& Communication Theory); 723.2 (Data Processing); 723.3 (Database
Systems); 921.4 (Combinatorial Mathematics, Includes Graph Theory, Set
Theory); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory,
Switching Theory, Programming Theory)
722 (Computer Hardware); 716 (Radar, Radio & TV Electronic Equipment);
723 (Computer Software); 921 (Applied Mathematics); 721 (Computer
Circuits & Logic Elements)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 92
(ENGINEERING MATHEMATICS)

26/5/6   (Item 6 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04241486   E.I. No: EIP95092839913
Title: Demand **paging for** video -on- demand **servers**
Author: Ozden, Banu; Rastogi, Rajeev; Silberschatz, Avi; Martin, Cliff
Corporate Source: AT&T Bell Lab, Murray Hill, NJ, USA
Conference   Title: Proceedings   of   the   International   Conference   on
Multimedia Computing and Systems
Conference   Location: Washington,   DC,   USA   Conference   Date:
19950515-19950518
Sponsor: IEEE
E.I. Conference No.: 43487
Source: International   Conference   on   Multimedia   Computing   and
Systems-Proceedings 1995. IEEE, Los Alamitos, CA, USA,95TH8066. p 264-272
Publication Year: 1995
CODEN: 002114
Language: English
Document Type: CA; (Conference Article)   Treatment: A; (Applications); T
; (Theoretical)
Journal Announcement: 9510W5
Abstract: With recent advances in storage and network technology it is
now possible to provide **video** on **demand** (VOD) service, thereby
eliminating the inflexibility inherent in today's **broadcast** cable

systems. A VOD server is a computer system that **stores** **videos** in compressed digital form and provides support for the **concurrent** **transmission** of **different** portions of the compressed **video** data to the various **viewers** . In this paper, we present novel **demand** paging algorithms that provide rate guarantees while utilizing the limited buffer space effectively and eliminating the disk bandwidth limitation. Our schemes, therefore, increase the number of **clients** that can be serviced concurrently. A VOD server, which is based on our schemes, is currently being implemented at AT&T. (Author abstract) 14 Refs.

Descriptors: Computer systems; Digital image storage; Data communication systems; **Television** **broadcasting** ; Cable television systems; Algorithms; Buffer storage; Random access storage; Image compression; Telecommunication services

Identifiers: **Demand** paging; **Video** on **demand** servers; **Video** data
Classification Codes:
722.4 (Digital Computers & Systems); 722.1 (Data Storage, Equipment & Techniques); 722.3 (Data Communication, Equipment & Techniques); 716.4 (Television Systems & Equipment); 921.6 (Numerical Methods); 723.2 (Data Processing)
722 (Computer Hardware); 716 (Radar, Radio & TV Electronic Equipment); 921 (Applied Mathematics); 723 (Computer Software)
72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 92 (ENGINEERING MATHEMATICS)

```
Set      Items     Description
S1     6013191    CLIENT? OR VIEWER? OR USER? OR STANDALONE OR STAND()ALONE -
                  OR PC OR PCS OR PERSONAL()COMPUTER? OR WORKSTATION? OR WORK()-
                  STATION? OR NODE?
S2     7596744    REQUEST? OR ASK OR ASKS OR ASKED OR ASKING OR PETITION? OR
                  CALL()(ON OR UPON) OR QUER? OR QUESTION? OR INQUIR? OR DEMAND?
                  OR REQUISITION OR APPLY OR APPLYING
S3     6046773    CAPTUR? OR MEMORY OR CACHE? OR STORE? ? OR STORING OR SAVE
                  OR SAVING OR KEEP? ? OR KEEPING
S4     4940625    (TV OR TELEVISION OR RADIO)()(SHOW? OR PROGRAM? OR BROADCA-
                  ST?) OR MEDIA()ASSET? OR VIDEO? OR AUDIO? OR MULTIMEDIA OR ME-
                  DIA
S5    10926284    TIME OR SCHEDULE? OR PERIOD OR DURATION OR SIMULTANEOUS? OR
                  CONCURRENT?
S6      392166    ENCOD??? OR DECOD??? OR ENCRYPT??? OR CIPHER? OR CYPHER? OR
                  DECRYPT? OR CYPHERTEXT OR ENCYPHER? OR UNCOD? OR UNENCRYPT? -
                  OR ENCIPHER? OR UNCOD? OR DECIHER? OR UNCYPHER? OR UNCYPHER? -
                  OR CYPTO?
S7     8450235    PUBLISH? OR ISSUE OR DISPURS? OR DISTRIBUT?
S8     6831948    DIFFERENT OR ANOTHER OR SEPARATE OR TARGET
S9     9068480    TRANSFER? OR STREAM? OR SEND? OR TRANSMIT? OR TRANSMISSION
                  OR GENERAT? OR PLAY? OR BROADCAST?
S10      15713    S1 (S) S2 (S) S3 (S) S4
S11     192343    S8 (3N) S5
S12      24820    S11 (S) S9
S13        150    S10 (S) S12
S14         22    S13 (S) S6
S15         11    S14 NOT PY>1999
File   15:ABI/Inform(R) 1971-2003/Jun 02
          (c) 2003 ProQuest Info&Learning
File 810:Business Wire 1986-1999/Feb 28
          (c) 1999 Business Wire
File 647:CMP  Computer Fulltext 1988-2003/May W2
          (c) 2003 CMP Media, LLC
File 275:Gale Group Computer DB(TM) 1983-2003/Jun 02
          (c) 2003 The Gale Group
File 674:Computer News Fulltext 1989-2003/May W4
          (c) 2003 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2003/Jun 02
          (c) 2003 The Dialog Corp.
File  98:General Sci Abs/Full-Text 1984-2003/Apr
          (c) 2003 The HW Wilson Co.
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
          (c) 2002 The Gale Group
File  47:Gale Group Magazine DB(TM) 1959-2003/May 28
          (c) 2003 The Gale group
File 624:McGraw-Hill Publications 1985-2003/May 30
          (c) 2003 McGraw-Hill Co. Inc
File 636:Gale Group Newsletter DB(TM) 1987-2003/May 29
          (c) 2003 The Gale Group
File 484:Periodical Abs Plustext 1986-2003/May W4
          (c) 2003 ProQuest
File 813:PR Newswire 1987-1999/Apr 30
          (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2003/May 30
          (c) 2003 PR Newswire Association Inc
File  16:Gale Group PROMT(R) 1990-2003/Jun 02
          (c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
          (c) 1999 The Gale Group
File 141:Readers Guide 1983-2003/Apr
          (c) 2003 The HW Wilson Co
File 553:Wilson Bus. Abs. FullText 1982-2003/Apr
          (c) 2003 The HW Wilson Co
```

Beyond browsing, Netscape Communicator 4.0 unites the enterprise

Text:
SUMMARY: A comprehensive suite of integrated Web applications suitable for
use in **stand** - **alone** , remote and networked environments. Advanced **users**
can customize Communicator's appearance and behavior, and novices can use
it right out of the box...

... you with an abundance of new groupware, collaboration, Internet access,
site design and central administration features. And **users** of previous
Netscape browsers can step in to the new version without returning to
college. Version 4...

... PROFILE The ``profiles'' feature takes some of the headache out of
dealing with systems shared by multiple **users** . Each **user** gets a
personal profile that remembers their bookmarks, newsgroups,
electronic-mail address books and messages. Communicator's...

... of Netscape's popular browser; Messenger, a successor to Netscape Mail
and a much-improved E-mail **client** ; and Collabra, Netscape's technology
for real-time participation in internal company discussion groups and
Usenet newsgroups...

... creates and publishes Web pages; and Netcaster, a ``push'' technology
that transports selected information to the desktop. **Another** of
Netscape's **time** -savers, SmartUpdate, helps speed the installation of
browser plug-ins. Of the two components in Netscape Conference...

... whiteboard saves more time than Internet telephony wastes. Conference
does an excellent job of setting up Internet **audio** conferences, but the
application is still hampered by the Internet's marginal **audio** quality
and the extra nuisance involved in Internet-based **audio** . But it can
eliminate long-distance telephone charges. Communicator's Professional
edition includes Netscape Calendar, which schedules meetings and tracks
group events, and IBM's Host On- **Demand** , which enables 3270 emulation and
mainframe connectivity. Netscape's AutoAdmin will let network
administrators centrally manage and update networked **PCs** . Every time a
user launches Communicator, it **queries** a central configuration file. If
the values have changed, the **user** is **asked** if he wants to update his
machine's configuration. Lightweight Directory Access Protocol (LDAP)
support lets **users** **query** multiple network, extranet and X.500
LDAP-compliant directories. Messenger's improvements make it a worthy
competitor...

... full-screen viewing. Support for Post Office Protocol 3, Internet
Message Access Protocol 4 and Simple Mail **Transfer** Protocol assure
compatibility with all major mail systems. Support for Secure/Multipurpose
Internet Mail Extensions **encryption** provides peace of mind for
organizations that want to take advantage of the Internet's global reach
and low cost to exchange information. Small but welcome features include a
spell checker and **user** -defined rights that determine how much access a
Java applet can have to the **client** computer's resources. Support for HTML
messaging enables you to **send** an HTML- or text-formatted message to a
recipient. That can help reduce the number of messages...

... message or attachment file size. Netscape's newsgroup application,
Collabra, is well integrated with Messenger. Collabra supports **store** and
forward discussions over a network, intranet and Usenet groups. Composer,
an HTML authoring tool, also improves...

`...` broad-based improvements in the way people and machines communicate. It provides an excellent solution for advanced **users** and administrators. Communicator's redesigned interface and fluid interapplication integration makes it an excellent choice to use...

15/3,K/4 **(Item 4 from file: 674)**
DIALOG(R)File 674:Computer News Fulltext
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056078
Invisible protection
Computerworld Telecom Journal
Security for carrier is in the eye of the beholder. But new forms of
encryption and biometric technology are cutting to the core, providing
barriers that prevent fraud and unauthorized access
Byline: Pat Blake
Journal: Computerworld   Page Number: T6
Publication Date: November 01, 1996
Word Count: 2619   Line Count: 240

Text:
...added network features. There are some security products, though, that require very active involvement from the end **user** . Internet access provider GridNet International, for instance, uses a biometric security system to thwart intruders. The Atlanta...

... by The National Registry, Inc. A scan is made of the customers' fingerprints, and the image is **stored** as a unique method of authentication for access to databases. That same image can be **encrypted** , digitized and used to activate secure **transmission** across WorldComm's asynchronous **transfer** mode (ATM) network. Such products are the basis of a generic three-pronged approach to security: authentication to determine that the person **requesting** entry is who he purports to be; authorization to give approval to be in the system at...

... level because that basic need for safety will have been addressed. Ignoring the need will not only **play** into the hands of the bad guys but could ultimately bring interactive communications to its knees. In...

... around the world right from computer terminals without much information about what actually goes on behind that **PC** , how the traffic is routed and what safeguards are in place. That distinction continues to blur with...

... going toward a broadband-type network proposal. And the cable systems are getting away from delivering just **TV** **programming** and into delivering Internet service and phone service over their broadband network," said Mike Powers, manager of...

... equipment that does not have any form of security built in," Owens continued. "The existing system basically **asks** a subscriber to provide its identity without performing any kind of verification. The system was designed that...
... designed with an embedded element of security. The digital method of signaling is itself a form of **encryption** because of the coded way in which the signal is **transmitted** . For example, the digital switch initiates the processing of an incoming call that is then sent to the base station. That base station **sends** a coded frequency that is unique to the receiving phone on that particular channel. The phone then **decodes** the signals and **sends** an acknowledgment back to the base station, and the call is processed. But the cellular industry has...

... subscriber attempts to make a call, the network reads the phone's electronic serial number and then **sends** it a random number. The phone uses the cryptographic algorithm to ...service is denied. And since the correct response is a function of the random number the network **transmits** , the authorizing code will be **different** each **time** . "With every call, the phone would respond with a different password," Owens said. The

process of issuing dynamic passwords is transparent to subscribers but is nearly impervious to hackers because of the difficulty in **capturing** the code. To harness fraud, carriers must also upgrade existing customers' phones and sell only phones that...

... point-to-point protocol (PPP) link. In the first level, called PPP authentication protocol (PAP), a clear, **unencrypted** text password is sent between two devices at the ends of a point-to-point link. For example, a Cisco Systems, Inc. router might **send** a password to another router and say, "Here's my password. Do you know who I am...

... same process as PAP except that it offers a higher degree of security because the password is **encrypted** . Remote Possibilities While cellular carriers have security hurdles to overcome, the increasing **demand** for remote network access is placing similar challenges in front of data transmissions, on wireless and landline...

... that aim to rise to the challenge. The company manufactures a communications product called SafeNet that combines **encryption** to scramble transmissions, making them unintelligible to intruders, with authentication via random passwords and digital signatures. The...

... One of the aspects of our technology, which is in our product, is an intelligent form of **encryption** that focuses on compatibility with computer networks such as the Internet or X.25. It works with...

... beyond the compact size. IRE products incorporate one of the strongest and most widely used forms of **encryption** , called the data **encryption** standard, and follow the security standards for banking and government uses. It's no surprise, then, that...

... espionage and the value of systems that prevent theft of data.As corporations migrate from mainframes to **client** /server- and World Wide Web-based systems, their networks are more distributed. The same information that was... using Cisco boxes and packet filtering technologies. Carriers look to companies such as Cisco to help them **keep** their businesses secure and their customers safe from the grasp of network intruders. It is part of...

... on gaming events. Global Casino brings blackjack and slot machines to the desktop. Both are running with **play** money to give the **user** a feel for the game while Intersphere beta tests the product. In the very near future, though, **players** will be anteing up out of their own pockets to **play** the book, which resides for legal reasons on the island of Grenada in the Caribbean (**users** would set up accounts in Grenada and **transfer** funds directly to their gambling accounts). As with other forms of electronic commerce, Intersphere had to deal with the perception that online purchasing is risky business. "Generally, people worry about **sending** their credit-card information across the Internet," said Michael Oryl, president of Intersphere. "Even with nonsecure browser technology, in my eyes it's safer to **send** a credit card over an open link on the Internet than it is to call a random camera **store** in New York and place a credit-card order over the phone. You're dealing with employees...

... passes that data by in a couple hundred milliseconds, which makes it much harder for somebody to **capture** it. "You have to filter every bit of packet of information that's going across, looking for...

... secure than things that are generally accepted now," Oryl added. For the sports book, Intersphere uses an **encryption** scheme that is used on data passed back and forth between the **client** application, which is typically a Web browser, and Wise Guy's service-side application. "The servers that...

... the security that is incorporated with the Web server. With Global Casino, Intersphere adds another layer of **encryption** called Diffie-Hellman, a public key form of cryptography used in a new product called Presence that...

... on a redundant array of inexpensive computers" that provides the
horsepower needed for the high level of **encryption** - 128-bit, said Jim
Daleen, president of the company. "Nothing is 100% secure. Anybody that
thinks so...

15/3,K/5   (Item 5 from file: 674)
DIALOG(R)File 674:Computer News Fulltext
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043610
...it's an adventure
With three major design alternatives and exotic vendor implementations to
**   boot, the virtual backbone planning process is not just a job. . .**
Byline: Steven S. King
Journal: Network World   Page Number: 49
Publication Date: April 10, 1995
Word Count: 2442   Line Count: 229

Text:
... years. The goal of virtual LANs is conceptually quite simple: to
provide high-speed connectivity for LAN **users** , guarantee low end-to-end
propagation delay and reduce administrative overhead. The choice of a
virtual LAN backbone technique will **play** a central role in the net's
performance. Virtual LANs are supposed to connect arbitrary groups of LAN
users at wire speeds, but without a suitable backbone between LAN
switches, virtual LAN performance will fall off as **user demands**
increase and the backbone topology grows. LAN switch suppliers appear to
have split into three camps, each with a different model for virtual LAN
backbones today - parallel cabling, proprietary shared **media** and
Asynchronous **Transfer** Mode. Each of these backbone approaches has its
strengths and weaknesses, particularly in the areas of scalability...

... employed, traffic within a virtual LAN has its own physical path, so
switches will have no problem **keeping** virtual LAN floods, **broadcasts**
and unicasts separated on their own cables. While this virtual LAN approach
is simple and free of...

... backbones discussed below will recommend parallel cabling with either
10M or 100M bit/sec Ethernet links. Shared **media** To avoid the complexity
and cost of parallel-cable virtual LANs, many switch vendors have devised
their own methods of **keeping** track of virtual LAN traffic on a single
shared- **media** backbone cable, whether it is 100M bit/sec Ethernet or Fiber
Distributed Data Interface. These proprietary techniques may sound bizarre,
but they are necessary to overcome the limits of nonchannelized **media** in
the virtual LAN environment. There are four major approaches to extending
virtual LANs over high-speed shared **media** : time-division multiplexing
(TDM), signaling messages, frame tagging and subnet IDs (see chart, page
55). Retix is...

... Inc. and LANNET, Inc. are both taking a similar angle on FDDI and 100M
bit/sec shared- **media** virtual LAN backbones by giving switches the ability
to exchange proprietary signaling messages that convey virtual LAN
information. In the signaling model, switches **send** one **another** short
messages each **time** a new station shows up on the network. Messages
indicate to which virtual LAN the new **media** access control (MAC) address
corresponds. For instance, when a station **sends** its first frame, the
local switch notes the MAC address and the port to which the station is
connected. The port indicates the virtual LAN on which the station resides.
The switch then **sends** other switches a several-byte message containing
the new station's MAC address and its virtual LAN...

... traffic starts to flow. Compared with TDM, signaling messages have the
advantage of working on standard shared- **media** internetworks with de-vices
from other vendors. On the downside, signaling requires a fair amount of
buffering and processing effort just to **keep** switches aware of new
endstations. This method also runs the risk of switch tables becoming

nonsynchronized if signaling is disrupted. To avoid this, switches periodically **send** one another their entire tables. As with the Routing Information Protocol, table exchange can eat a significant...bandwidth without the need for time-division or other logical channelization. Frame tagging The third major shared- **media** backbone model for virtual LANs, frame tagging, is used by Xylan Corp. and LANNET on FDDI and other high-speed LANs. Frame tagging **keeps** track of virtual LAN traffic by adding a short (4-byte) header to each frame that traverses...

... learning process (see story, this page). Frame tagging lets multiple virtual LANs freely share a single shared- **media** cable. But, as usual, there are trade-offs: Frame tagging can exceed the maximum allowed frame length...

... maximum al-lowed length after frame tagging, Xylan switches will automatically fragment the frame into legal lengths, **send** them across the backbone and reassemble the fragments at the other end. Fragmentation makes frame tagging transparent...

...layer. This is accomplished by appending a security header to each frame containing fields that can identify **encryption** techniques, security groups and related appli- cation-defined security information. Also, 802.10 includes a fragmentation and...

... 802.10 to virtual LANs by using the frame tags to convey virtual LAN identifiers across shared- **media** backbones. Although 802.10 is not supported by other vendors, it po-tentially could allow virtual LANs...

... LAN switches that create virtual subnets do not need frame tagging, signaling or TDM to exploit shared- **media** backbones. In subnet virtual LANs, the standard subnet ID in each frame serves a dual role. For traffic within virtual LANs, it serves as a virtual LAN identifier, telling switches where floods and **broadcasts** should go. For traffic be-tween virtual LANs, the subnet ID serves its usual function as a...

... be manually configured through an arbitrary mesh network. This greatly enhances the flexibility and scalability of shared- **media** virtual LANs because all virtual LANs don't have to share the same end-to-end paths...

...networks. ATM backbones for virtual LANs ATM has some decided advantages over parallel cable and proprietary shared- **media** virtual LAN backbones. Even if a network has no ATM endstations, ATM may still be the best... techniques. Many virtual LAN switch vendors are in the process of exploiting ATM by adding an.ATM **User** -to-Network Interface (UNI) to their products. UNI support allows direct connection to ATM backbone switches. Some...

... so the most viable switched virtual network products will provide high levels of support for both shared- **media** and ATM virtual LAN backbones. In the realm of the largest vendors, Cisco is further along than Bay Networks in terms of executing a plan that integrates ATM and shared- **media** virtual LAN backbones into switch products. Cisco's promise of seamless integration of ATM virtual LAN backbones and 802.10 shared- **media** virtual LANs could put it in a leadership position in switched virtual networking. However, Cisco is having...

...platforms. For instance, Bay Networks LAN switches and ATM backbones are all managed by the Optivity graphical **user** interface. Backbone bets As business applications increasingly require low-delay, high-bandwidth connectivity, switched virtual LANs will...

...measured approach for network designers would be to experiment initially with parallel-cable virtual LANs, use shared- **media** virtual LANs in the near term, and finally migrate to ATM backbones in the long term. Ultimately...

00596163
VENDORS EVOLVE FOR NEW MARKETS
ELECTRONIC MESSAGING NEWS
March 18, 1998   VOL: 10   ISSUE: 6   DOCUMENT TYPE: NEWSLETTER
PUBLISHER: PHILLIPS BUSINESS INFORMATION
LANGUAGE: ENGLISH   WORD COUNT: 1219   RECORD TYPE: FULLTEXT

TEXT:
As the E-mail market matures, **users** are looking beyond
issues such as installation to more complex ~ and more
significant ~ ones such as security...

...information. For example, integra-tion with calendars
and other mess-aging systems gives vendors new opportunities
and **users** new benfits.
Yet integration raises **questions** as systems become more
complex and administrators must stay on top of an expanding
array of devices...
...on the
technology. Additionally, governments in Europe and else-where
have limitations on the use of strong **encryption** in software,
so even if the United States were to ease restrictions on
exporting security solutions, import...

...in my view security vendors must
make the technology easier for corporations to deploy and for
people **sending** E-mail to use.

EMN: What are the challenges corporations face with E-
mail management?
DeBello: The...

...rich content in E-
mail with standards like HTML. If you couple that with the
fact that **users** can now **send** any type of file as an E-mail
attachment, the comp-lexity of the messages sent has...should
administrators react?
DeBello: Administrators of E-mail systems must also
react to the requirements of their **users** . Different people use
E-mail in different ways and managers must provide **users** with
appropriate solutions. For example, our Eudora E-mail **clients**
support two Internet standards, POP3 [Post Office Protocol] and
IMAP4 [Internet Message Access Protocol]. POP3 is based on
retrieving the mail from the server and **storing** it on a local
computer. IMAP4 is a server-based system. For some **users** POP3
is the best method for retrieving E-mail; for others IMAP4 is
the better choice. E-mail managers must design their systems
to suit the needs of their **users** .

EMN: What about other devices, such as cellular phones
and personal data assistants?
DeBello: Finally, as **users** access their E-mail from
devices other than computers corporations must design their E-
mail systems accordingly...

...EMN: What will be the dominant trend for electronic
messaging in 1998?
DeBello: Integration of voice and **multimedia** into E-mail
will become more prevalent in 1998. Standards such as HTML
will allow a much richer E-mail experience for **users** . We have
recently added HTML support into our Eudora product, which not
only allows the exchange of...to a web page or attach that schedule to an
E-mail
message and E-mail my **schedule** to **another** person. With the

`Internet standards that are being created, that person could
then drag that information onto...

...using the same program as I am. (Jim
DeBello, QUALCOMM, 619/587-1121, http://www.qualcomm.com.)

Player Profile
Jim DeBello

Professional Background: Joined QUALCOMM [QCOM] in 1996
as vice president and assistant general manager...

15/3,K/10   (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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04144304   Supplier Number: 54374091   (USE FORMAT 7 FOR FULLTEXT)
AUDIO NOTES.
Audio Week, v11, n15, pNA
April 12, 1999
Language: English   Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 2617

...   sales and said it expected first-quarter profit to grow beyond 20%
target. March sales at RadioShack **stores** rose to $297 million from $255.3
million on 15% gain in same- **store** sales. For first 3 months of year,
sales climbed 14% to $766.3 million on 13% gain in same- **store** sales. At
same time, Tandy reported in proxy for May 20 annual meeting that Pres.-CEO
Leonard...

...be in- and out-of- warranty servicer for its wireless phone products,
As part of agreement, RadioShack **stores** will carry Motorola wireless
phone accessories including batteries, headsets, leather cases. March
Retail Sales Reports: Good Guys...

...year earlier, and for 6 months, increased 3% to $513.2 million from
$499.4 million. Same- **store** sales edged up 1% for quarter but were flat
for first half... Tweeter Home Entertainment sales for first quarter jumped
14.2% to $62.2 million from $54.5 million as same- **store** sales rose 1%,
excluding results of Houston-based Home Entertainment chain, which Tweeter
acquired Feb. 1 and...

...Jeffrey Stone said Home Entertainment inventory purchase orders were
"mistakenly cancelled" by previous management instead of being **transferred**
 to Tweeter: "This caused us some sales problems in February and the first
week of March." But...

...digital television." As with other chains, McGuire said Tweeter was hurt
by shortages of lower-end DVD **players** . Nevertheless, he said DVD hardware
revenues soared 100% from same quarter year earlier. Latest blemish on
sanctity...

...DVD-807 was preceded by Internet leaks on how to change code with deck's
remote control. **Player** is $400 Region-2 Europe version of DVD-907 sold in
Region 1 N. America. Information wasn...

...decks to make code "totally inaccessible to consumers." "Advancing the
Art of Sound" is theme of 107th **Audio** Engineering Society (AES)
convention Sept. 24-27, Javits Convention Center, N.Y. -- 212-661-8528. CD
Warehouse halted sales of Disc Go Round (DGR) franchises less than year
after buying 134- **store** chain from Grow Biz International for $7 million,
chain said in annual report. CD Warehouse will honor...

...Court that sought temporary injunction in alleging that CD Warehouse had
breached franchise agreement by allowing DGR **stores** to "encroach" on its
development area. Court rejected **request** for temporary injunction, but

Jimick has filed arbitration **demand** with American Arbitration Assn. (AAA). At same **time** , CD Warehouse filed **separate** **request** with AAA charging that Mark Kane and Compact Disc International had violated noncompete clause in 1996 asset purchase agreement. Claim seeks damages and 300,000 shares of CD Warehouse common owned by Kane. NCT **Audio** Products is using MTV Campus Invasion Tour to launch MTV-branded flat speakers introduced at last Las...

...U.K.-based NXT on flat-panel speaker technology. NCT said in 10-K report that NCT **Audio** on Feb. 9 expanded 18-month-old cross- licensing pact with NXT to include aftermarket "ground-based first-quarter revenue. He said company expects positive results from new **audio** subsidiaries such as DistributedMedia.com, which he described as **media** company that uses Internet to deliver music programming and billboard ads to "out-of-home venues." NCT...

...by Zenith at CEMA spring conference in Washington. Company said ATSC Remodulator IC translates output of DVD **player** , set-top box or other digital device to digitally modulated signal that's compatible with RF inputs...

...said. Chip samples are available now, with volume production set for midyear. Toshiba acquired 5% stake in **Audiovox** Communications Corp. (ACC) for $5 million. ACC, subsidiary of **Audiovox** Corp., buys some of its cellular phones from Toshiba and has long history with company. Companies tangled...

...efforts to conserve electricity in CE products. Panasonic has 300 products that qualify for rating, including DVD **players** , **audio** receivers, minicomponent stereos. Company said 97% of its 1998 unit sales were Energy Star- compliant, compared with...

...says has greater longevity. Memorex said extra 6 min. on CD-R compared with music CD benefits **users** making individual compilations. New alloy that combines high reflectivity of silver with corrosion-resistance of gold yields...
...their reflectivity, it said. Chinese-designed Dolby Digital receiver will use Zoran's ZR38601 chip for Dolby **decoding** , company announced. New Dolby Digital AV receiver hails from Xiamen Xianin Electronics, among country's largest OEMs...

...China, manufacturer said. More Japanese CE makers are relocating or expanding R&D functions overseas. Kenwood recently **transferred** home **audio** development and design to wholly owned Malaysian plant to cut time between design and manufacturing. Matsushita, which makes CD pickups in Singapore, shifted relevant **audio** equipment planning there last fall. Sharp plans to **transfer** AV planning to its Malaysian plant and double engineering staff there by next year. Sansui's first...

...fever hasn't escaped LP turntable category. New publication titled The LP Is Back! is available from **Audio** Amateur (888-924-9465). It's collection of articles from analog LP's heyday, compiled to give...

...maintenance. Aiwa stereo TVs in 13" and 20" size designed to complement company's Mini Theater digital **audio** systems will ship in June, following delivery of same-size hi-fi stereo TVCRs in May. Company...

...to 20" ($300) and 13" ($250) include side-firing speakers and presets that optimize picture for movies, **videogames** , viewing in subdued light. **Videogame** function command on remote control automatically selects front-panel inputs where console typically is connected and activates...

...based Trio Electronics, founded in 1946. It entered autosound field in 1980, challenging earlier entry by home **audio** rival Pioneer. DVD rentals at Blockbuster's U.K. chain have been extended to 140 **stores** from 30 in market test begun last Oct. Program provides 2-night rental of Toshiba DVD **player** for $16 with 2 free loaner movies; additional DVD rentals cost $5 daily. DVD disc production will...

...LCD screen; Internet View Cam, digital camcorder with Internet access;
TVs and set-top boxes with digital **broadcast** reception. Sharp MiniDisc
(MD) portable with digital signal processor for 13 different listening ...
and is less than 1" thick. Various music modes can be selected by large
jog- dial, and **player** has backlit LCD display. Sharp said 40-sec. **memory**
buffer prevents skips, and **playtime** is 13-1/2 hours with rechargeable
lithium-ion battery, 23 hours with addition of AA alkaline...

...it to be used as reflective-type display with no backlight in bright
outdoor settings, or as **transmission** -type display that uses backlight for
dim indoor settings. IEEE 1394-based device that functions as cable modem
and interface for home **multimedia** network has been developed by NEC.
Company said its Smart Cat home gateway will enable home **PCs** to download
audio , **video** and data at high speeds from Internet and provide
subsequent distribution to digital storage and display devices inside home
without need for LAN or Ethernet routing. System has 400 Mbps data
transfer rate and will be field-tested this year for compatibility with
other IEEE-1394 devices, NEC said...

15/3,K/11   (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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04133800   Supplier Number: 54264658   (USE FORMAT 7 FOR FULLTEXT)
NOTEBOOK.
Consumer Electronics, v39, n13, pNA
March 29, 1999
Language: English   Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 4270

   (USE FORMAT 7 FOR FULLTEXT)
TEXT:
...more than 30 titles monthly tagged with phone number for customers to
enter drawing for Sony DVD **player** . Besides awarding deck to 2 **viewers**
monthly, retailers that rented DVDs to winners also get Sony **player** . Pool
of DVD titles for rental in Europe is expected to deepen later this year,
Columbia TriStar...

...and-date releases with VHS there is hoped to stem trade in Region 1 U.S.
discs **played** on modified decks. But recent catalog from U.K. mail order
house McNo offered long list of...

...over CD-I distribution from Philips when latter dropped software for
interactive format. In Japan, meanwhile, top **video** rental chain Culture
Convenience Club has expanded DVD rentals to 800 of its 950 outlets, from
test begun in 2 Tokyo **stores** in Dec. 1997. Retailer said rentals doubled
to 1,200 in Dec. in pilot **stores** from year ago. However, spokesman said
DVD **player** rentals had declined, indicating increase in installed base.
DVD rental titles in Japan are available from Pioneer...

...granted Sega worldwide nonexclusive license to use its Force Feedback
Steering technology in arcade games and home **videogame** systems. Sega in
turn has given Atari nonexclusive worldwide license for its "voice
changeover" technology. Atari also...

...that its Force Feedback Steering technology has received Japanese Patent
Grant, effective through Jan. 10, 2010. Smart **videogame** consoles with
videophone , Internet and voice- control capabilities are goal of
govt.-sponsored research by Japan's Ministry of International...

...is among likely participants, along with Hitachi, NEC, Toshiba.
Meanwhile, Sega said it will set up Internet **videogame** site for its
Dreamcast console in Japan in summer. Site will offer Mahjong, card games
and other...
...quickly and at low cost in move designed to leverage Dreamcast's

Internet access and thereby expand **user** base, Sega said. Company said it has yet to decide whether it will charge **users** to **play** . Sega also is proceeding with plans to make Dreamcast home games compatible with its arcade games. **Players** can train wrestlers from upcoming arcade game on Dreamcast console at home, then **store** moves in console's removable Visual **Memory** cartridge for use in arcade machines. Konami said it plans similar arcade system compatible with mobile **memory** card from Sony **PlayStations** . DVD publishing and DTV programming joint venture will be launched soon by Toshiba and Japanese publishing giant...

...s books and magazines on DVD for sale to consumers and develop digital programming for sale to **broadcasters** . Partners said content also might be distributed via Internet. Consumer **encoders** for Dolby Digital surround sound system have been developed separately by Matsushita and Pioneer. Technology will enable upcoming home recorders using DVD, **PC** hard disc or other **media** to record **audio** in multichannel digital format from **broadcast** or online sources, companies said. Each said its processor complies with Dolby Digital Consumer **Encoder** (DDCE) standard, meaning that incoming **audio** is compressed to 1/3-1/10 of original data to produce bitstream that can be **decoded** by current Dolby Digital circuits in DVD **players** , home theater receivers and processors, as well as digital TVs using U.S.- developed ATSC standard. Dolby Digital also is surround sound format adopted by U.S.-based satellite **TV** **programmers** and most theatrical productions. Matsushita said its single-chip **encoder** will be available in sample quantities by year-end at $56. Pioneer didn't announce delivery or pricing. Compared with professional Dolby Digital **encoders** , consumer versions need less processing power and voltage. Alliance Entertainment said it will use AT&T secure digital distribution system as core of plan to deliver music, **video** and DVD via Internet. AT&T technology, called a2b music, will provide secure digital downloads and **streaming** **audio** capability from Alliance Web site. Digital IC recorder just 2" long and 1/8" thick goes on...

...from Toshiba. Voice Bar Pro DMR-SX1 (about $279) weighs 3 oz. and uses 8 Mbyte Smart **Media** flash **memory** to record up to 132 min. dictation. Toshiba said it plans to ship 5,000 monthly. **Audiovox** nearly doubled first-quarter income as sales shot up 74% (see financial table) on strength of increased...

...phones and improved economies in Southeast Asia, company said. Earnings rose despite $2.9 million decline in **audio** sales and drop in economically troubled Venezuela. Communications group, which includes wireless phones, more than doubled sales...
...of sales to AirTouch, Bell Atlantic, GTE and others and will rise to 65% by year end, **Audiovox** Communications Corp. Pres.-CEO Philips Christopher said. Company plans to ship Toshiba-built CDMA phone in April...

...phone for international market that currently accounts for 13% of overall revenues. In automotive electronics, which includes **audio** , sales edged up to $39 million from $35.2 million. Downturn in **audio** sales was attributed largely to reworking of licensing agreement with Kmart to "focus on a few key models," Automotive Electronics Div. Senior Vp Patrick Lavelle said. Sales of mobile **video** products including in-car LCDs rose to $8.2 million from $1.1 million as Nissan program...

...extended to 3rd quarter and BMW was added to roster, he said. Nissan extension is projected to **generate** $8-$10 million in added revenues. CD Warehouse halted sales of Disc Go Round (DGR) franchises less than year after buying 134- **store** chain from Grow Biz International for $7 million, chain said in annual report. CD Warehouse will honor...

...Dist. Court that sought temporary injunction in alleging that CD Warehouse breached franchise agreement by allowing DGR **stores** to "encroach" on its development area. **Request** for temporary injunction was rejected, but Jimick has filed arbitration **demand** with American Arbitration Assn. (AAA). At same **time** , CD Warehouse filed **separate** **request** with AAA alleging that Mark Kane and Compact Disc International violated noncompete clause in 1996 asset purchase...

...4 million for year, with U.S. accounting for 79% of revenues, international market rest. Distributor Valley **Media** , which has filled orders for CDNow since 1994, accounted for 85% of online company's cost of sales in year ended Dec. 31. CDNow-Valley **Media** agreement expires in June. First 9" TVCR ($380)from Panasonic is 2-head model that runs on...

...2 billion acquisition of Learning Co. (LC) Proposed purchase, announced in Dec., would merge Mattel's Barbie **multimedia** titles with Learning Co.'s stable of Reader Rabbit children's **PC** titles. At same time, Learning Co., in what is likely to be its last earnings report as...

...company said. Set-top notes: UniView has introduced upgraded version of set-top box that adds DVD **player** and is based on Motorola's **Streamaster** platform. UniView 310 boosts **memory** of 210 model to 32 SDRAM from 8, increases size of hard drive to 3.2 Gb from 1.1 Gb, has 300 MHz Intel Celeron processor. Device also adds MPEG-2, Dolby Digital **audio** support, PCI slots. It will be targeted at commercial market including hotels and hospitals, with pricing topping...
...build majority of joint venture's set-top boxes, with production to begin in 4th quarter. DVD **player** output in China will be expanded by Panasonic parent Matsushita this year. Company said buildup is effort to reduce **player** costs there and gain competitive advantage before Chinese manufacturers receive DVD licenses. Matsushita said it will invest $4.2 million at plant of subsidiary in Dalian, China, and increase production to 70,000 **players** this year from 8,000 last year. Besides finished decks, subsidiary will make 200,000 DVD mechanisms...

...decision to boost DVD production there is result of flagging VCR sales in country where MPEG-1 **Video** CD **players** dominate home **video** market. Overall market for DVD **players** is expected to reach 500,000 in China this year, it said. It's first Japanese CE company to manufacturer finished DVD **players** there. Pioneer supplies components to plant in Shanghai for local assembly, as does Hitachi in Taiwan. **Video** CD (VCD) will be springboard for online interactive services in China, now that Microsoft has cut deals under which Chinese manufacturers will build Windows CE operating system into MPEG-1 disc **players** , making them inexpensive set-top Web browsers. Leading charge is microprocessor maker C- ...Windows CE-capable units later this year, including domestic giant Legend Computers and Taiwan-based Acer. VCD **players** and **standalone** set-tops will have inputs for keyboards and joysticks and will display online content on conventional TVs. Separately, Microsoft signed agreement with Hong Kong Telecommunications to deliver **videogames** and full-motion **video** movies through telco's fiber network. Recordable DVD in DVD-RAM format will go on sale in...

...convert 2 of 5 production lines to handle Wega as well as existing 32" TV and 19" **PC** CRTs. First 32" line will be converted in May, 19" in June. Revamped lines can be switched...

...production within 24 hours. "The flexibility of the lines will allow us to react quickly to market **demand** ," Senior Sony Display Device Vp Kenji Tanaka said. Factory will continue manufacturing 20-27" TV tubes and 17" **PC** CRTs. Sony has spent $100 million over last 5 years expanding plant, including $60 million to add 19" **PC** CRTs in July 1997. Internet Notes: Internet-based movie retailer Reel.com is providing its upcoming DVD release schedule to When.com calendar **users** . When.com is free Internet calendaring service that delivers personalized, comprehensive event information to online **users** who then can integrate data directly into personal or group calendar. Service automatically tracks events and alerts ...

...to all events that might be important to them (including concerts, sports events, Web events). When.com **users** also can take advantage of Reel.com's DVD preorder feature... Web site MP3.com announced it will use software developer **AudioSoft** 's new BackOffice system to track royalty payments due for music downloads... New **media** content developer MediaX said its live Web cast of Rod Stewart's Charlotte, N.C., show in...

`...it will spend $100-$125 million repointing subscribers' dishes in 1999-2000 if wins approval for license **transfer** for new slot. Rent-A-Center (RAC), carrying more than $800 million in debt in connection with...

...million of preferred common to Apollo Management. With purchase, RC more than tripled size to 2,156 **stores** , including 324 franchisees. "Our ability to repay or refinance our current debt depends on our financial and ...

...809.7 million in revenues in 1998, followed by appliances at 19%. Whirlpool products were top revenue **generators** at 14.5% of total, with Magnavox next at 13.4%. Service Merchandise (SM) late Fri. said...plans to file for voluntary bankruptcy protection by month's end. Group of 5 vendors had filed **petition** for seeking to force SM into involuntary bankruptcy protection March 15 saying they were owed $8.2...
...Mawr, HiFi Buys and Home Entertainment as part of strategy to expand from New England base. Rex **Stores** , benefiting from $2.4 million sale of real estate, reported 4th-quarter income rose to $7.8...

...through investment in synthetic fuel partnership, Rex posted earnings of 70 cents per share, analysts said. Same- **store** sales fell 3%. Downturn in 4th-quarter sales was result in part of closing of 10 Sun TV and Campo Electronics **stores** that cut into Rex revenues, Chmn.-CEO Stuart Rose told analysts in conference call. Both Sun and Campo liquidated **stores** in quarter. "We chose not to chase their prices," Rose said. For year ended Jan. 31, Rex said income jumped 51% as sales inched up 1% (see financial table). Chain will open 10-15 **stores** this year and has added Maytag appliances to merchandise mix, Rose said. It also is projecting **generating** $2.5 million through sale of tax credits. To bolster image, Rex has hired St. Louis-based...

...now we're working on marketing," he said. Sega could spend $17 million to develop Shenmue role- **playing** game for Dreamcast console, press reports in Japan said. Game development is being directed by Sega executive...

...million copies of Shenmue, but said he didn't believe success of Dreamcast depends on title. Role- **playing** game is said to feature 500 characters and 1,200 rooms, with seamless transitions between movie and animation sequences. Impasse on used-game sales in Japan has been settled. **Videogame** market-share leader Enix has agreed to let retailers sell used games in exchange for copyright fee...

...games released in Japan after Tomb Raider 3, which made debut March 4. Although sale of used **videogames** , CDS and **videos** is routine in U.S., Japanese retailers don't have protection of U.S. First-Sale Doctrine...

...to serve broadband and high-speed Internet customers. Spinner.com is offering free co-branded Web-based **streaming** music **player** , FacePlates, providing customized features for different broadband services. Company said it has had "great success" with narrowband...

...It cited Forrester Research report that said more than 20,000 porn sites exist in U.S. **Streaming** **video** and sound clips to promote movies, **videogames** and music sold online are available to retailers from **Video** Pipeline service. Haddonfield, N.J.-based company said it has 7,500 movie previews, 10,000 music **videos** and 2,500 **videogame** previews that electronic retailers can add to their Websites. Proprietary system doesn't require special software on consumers' or retailers' **PCs** . Spots can be scaled for modem connections greater than 25 kbps, with motion **video** smoother at higher speeds but nonetheless sharp and with crisp **audio** at any connection, **Video** Pipeline said. Service is priced on per-view basis to be affordable to retailers of any size, company said. Movie-based **videogames** will be arriving at retail soon -- and hit **video** games will make transition ...64 "probably" in May, Activision spokeswoman said. Companies said game features constantly evolving "living world" in which **players** take on role of ant Flik, main character in film. Pricing hasn't been announced. Meanwhile, movie...

...from silicon and monitor to silver halide and screen is likely to
continue. Movie based on Sony **PlayStation** hit game Final Fantasy will be
distributed in U.S. by Sony's Columbia-TriStar movie affiliate...

...29.98, with one film on each side of disc. Release date coincides with
Arrival II's **video** rental debut. Title stars Patrick Muldoon and will be
supported by Artisan's Platinum Choice copy depth...

...Stephen King's The Stand (TVD March 1 p12). Recordable CD format is
picking up momentum in **PC** market as built-in rather than add-on.
Hewlett-Packard has begun including internal rewritable CD (CD-RW) drives
in new HP Pavilion **PCs** . It said positive reaction from consumers for its
external CD-RW drive was main factor in decision to include build-in drive
now. Meanwhile, Sony is extending CD-R format to portable **PCs** . It said
its compact CRX50A (about $665) weighs 7 oz. and is 15 mm thick. Bundled
software...

```
Set      Items    Description
S1        218     REPLAYTV OR TIVO OR (PERSONAL OR DIGITAL)()VIDEO()RECORDER?
                  OR DIGITAL()NETWORK()RECORDERS OR SMART()TV OR VIDEO()RECORD-
                  ING()COMPUTER? OR TIME()SHIFTED()TELEVISION OR HARD()DISK()RE-
                  CORDER?
S2          3     PERSONAL()TELEVISION()RECEIVER? OR TELEVISION()PORTALS OR -
                  ON()DEMAND()TV
S3        221     S1 OR S2
S4         43     S3 NOT PY>1999
S5         18     S4 NOT PD>19990211
S6         18     RD (unique items)
File 634:San Jose Mercury  Jun 1985-2003/Jun 02
        (c) 2003 San Jose Mercury News
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COOL NEW STUFF CUTTING-EDGE INNOVATIONS SEEK BUYERS
San Jose Mercury News (SJ) - Sunday, January 10, 1999
By: MIKE LANGBERG AND JON HEALEY, Mercury News Staff Writers
Edition: Morning Final   Section: Computing + Personal Tech   Page: 1F
Word Count: 2,657

MEMO:
International Consumer Electronics Show
   CORRECTION: SETTING THE RECORD STRAIGHT (publ. 1/12/99, pg. 2A) An
article on Page 1F of Sunday's Computing + Personal Tech section quoted
analyst Richard Doherty of the Envisioneering Group regarding sales of new
digital televisions without providing the full context of his remarks.
Doherty's estimate of 2,500 to 3,000 sets sold in 1998 refers only to
high-definition television sets, which are capable of displaying the most
richly detailed digital pictures. The Consumer Electronics
ManufacturersAssociation estimates that more than 13,000 digital sets of
all kinds were sold last year.

TEXT:
LAS VEGAS - DIGITAL technology is really changing the way we live.
   Any doubters would have struggled to maintain their denial at the
massive International Consumer Electronics Show, which ends its four-day
run here today.

The 90,000 who gathered for the annual gadget-fest saw a sweep of new
products, from the spectacular to the mundane, being re-made with silicon
chips, from flat-panel televisions selling for more than $10,000 to $69
wall clocks that set themselves to the correct time by receiving radio
signals.

   In recent years, CES has become something of a proving ground for
digital ideas. Companies display new products in gaudy booths on the floor
of the Las Vegas Convention Center and nearby hotels, hoping retailers will
decide to stock them and journalists will give them exposure.

   This is big business. The Consumer Electronics Manufacturers Association
of Arlington, Va., which organizes the show, estimates consumer electronics
sales in the United States will hit $79 billion this year, up 5 percent
from $76 billion in 1998. That's $1,000, on average, for every American
household.

   The lure of high-tech upgrades is even keeping sales strong in
maturecategories. Americans, for example, are expected to buy 50 million
telephones this year and 28 million television sets.

   Here's a look at some of the digital designs drawing attention at this
year's show. For those who want even more, you can become a virtual
attendee through the CES Web site (www.CESweb.org).

   Digital television

   Thinner, flatter and wider -- but not more affordable, at least not yet.

   That's the picture for digital television, as more than a dozen
manufacturers showed off pricey new models at CES. To tune in and watch the
digital broadcasts, offering dramatically sharper pictures and better sound
than conventional analog TV, consumers still have to plunk down $5,000 or
more.

   It's no surprise, then, that DTV sets aren't selling in big numbers.
Broadcasts only started last fall in the Bay Area and a few other big
cities. Analyst Richard Doherty of The Envisioneering Group in Seaford,

N.Y., estimates only 2,500 or 3,000 sets were sold in 1998.

The models on display this year were mainly big-screen, rear-projection sets, such as Toshiba's 65-inch, Philips' 64-inch and Hitachi's 61-inch models. Their formats ranged from wide-screen high definition television, or HDTV, which offers photographic images with fine details and rich color, to standard definition television, which has a crisper picture than today's analog sets, but no more detail.

To ease some of the sticker shock, many of the models do not have a digital tuner built in. They can display conventional TV signals without problem, but need a separate receiver to tune in digital signals.

The idea is to let buyers wait for a later generation of digital receiver that will cost less than the first models, which cost from about $1,500 to $5,000. And there were signs that prices were, in fact, falling: Thomson, for example, demonstrated a digital receiver that can tune in both over-the-air and DirecTV satellite broadcasts. It is expected later this year for $649.

Panasonic demonstrated a new receiver, due in late 1999, that has more features and works with a greater variety of monitors than its current $1,600 box, yet is expected to sell for $600 less. With other manufacturers' prices dropping, however, Panasonic's $999 digital receiver could still be the most expensive on the market next Christmas, a Panasonic spokesman observed.

Need for a standard

The need for lower prices isn't the only drawback. Set-makers have yet to settle on a standard for connecting a digital receiver to a monitor, so one manufacturer's receiver may not work with another manufacturer's display.

Nor is there much evidence yet that display costs are coming down. Instead of offering less expensive screens, many of the set makers showed off more costly ones based on new technologies.

These included plasma monitors thin enough to hang on a wall and liquid crystal display (LCD) screens, the same technology found on laptop computers. Many of the models were prototypes, and only some were capable of displaying an HDTV picture.

The plasma monitors from Philips, Panasonic, Pioneer, Toshiba, Sanyo, Sharp, Zenith and Thomson, which ranged from prototypes to production models, were priced at $11,000 and up. The LCD screens -- none of which has a price or availability date -- included 43-inch and 50-inch diagonal wide-screen monitors from Samsung that can be mounted on tabletops, and a rear projection set from Sharp that features a new technology aimed at brightening and sharpening the contrast of the screen.

Coming down from the stratosphere, officials at Thomson -- which makes RCA, GE and ProScan sets -- pledged to bring out two direct-view models by Christmas 1999 that will be far more affordable than any other HDTV sets on the market. They did not disclose prices for the 34-inch and wide-screen 38-inch sets, however, other than to say they will be well below Sony's $9,000, 34-inch direct-view set.

Sony, meanwhile, trundled out its biggest screen ever: a 65-inch diagonal rear-projection digital set, available in the spring for about $12,000.

Interactive TV

Digital technology is also making television less of a passive viewing experience.

Two leading providers of small-dish satellite TV service in the United States -- DirecTV and EchoStar, operator of The Dish Network -- announced

plans to add interactivity and digital recording capabilities to their services in 1999.

In the second quarter of 1999, DirecTV officials said, they will incorporate technology from Wink Communications of Alameda into their receivers, enabling viewers to call up additional text and graphics or order products related to the programs they're watching.

And, by the end of the year, a new DirecTV receiver from Philips will include digital recording technology from **TiVo** Inc. of Sunnyvale, letting viewers pause, replay or delay live programming as if it were on tape. The **TiVo** service, which may carry an additional fee, also records programs and advertisements for viewers based on their tastes.

This spring, EchoStar officials said they will start selling a new receiver developed with the help of Microsoft's WebTV. In addition to digital-recording functions similar to **TiVo** 's, the receiver will enable users to obtain information from the Internet at extremely high speeds. If the user wants information on demand from the Internet or the ability to send e-mail, the new EchoStar box can provide that, too -- for an extra monthly fee, payable to Microsoft.

Toshiba, meanwhile, demonstrated three new analog TV sets with built-in Wink technology. Available later this month, the sets -- which range from a 36-inch model for $1,700 to a 55-inch set for $2,700 -- enable viewers to call up text and graphic enhancements added by selected broadcasters, including NBC, ESPN and the Weather Channel.

Thomson announced its plan to develop an interactive TV with Microsoft Corp., which recently bought a 7.5 percent stake in the company. The TV will include the Windows CE operating system and some WebTV technology, but it won't mimic the Internet-on-TV functions of WebTV, said James E. Meyer, chief operating officer of Thomson. Instead, once broadcasters settle on a standard way to encode text, graphics and supplemental video clips into their programs, the set will let viewers display those enhancements.

Unlike WebTV, Thomson's ETV will not carry a monthly service fee.

Home networking

This year's show, like the even bigger Comdex computer trade show two months ago, spotlighted new, easy-to-install home computer networks for people who need to move data around the house. The home-network market is considered fertile ground as an increasing number of families buy second and third PCs, and more information converts to digital format.

On display were devices that use phone lines, power lines, radio waves and special digital cables to move information, with capacities ranging from 1 megabit per second to 88 megabits. Those capacities are increasing steadily, hastening the arrival of networks that can transmit multiple channels of video throughout the home.

How much of the public actually needs or wants a home network remains to be seen. Analysts suggest one of the driving forces will be the arrival of low-cost, high-speed Internet access, a phenomenon that has yet to reach most U.S. homes.

Telephones

No longer are telephones dumb devices that merely ring to summon their owners.

Uniden America Corp. of Ft. Worth, Texas, showed its new Long Distance Manager cordless phone at CES. Due in July with two models at $49 and $79, theLong Distance Manager looks like other 900 megahertz cordless phones, except for an L.D. button. Pushing this button before making a long-distance call automatically triggers a service that searches a database of rates from more than 60 long-distance carriers and selects the

lowest at that given moment.

The service is free to consumers, other than the cost of the calls themselves, and adds no more than half a second to the process of completing a call. A company named CallManage, which provides the service for Uniden, makes its money by taking a tiny cut of the payments to the long-distance companies with which it has negotiated deals.

Command Communications Inc. of Aurora, Colo., is just starting to ship PrivateTime, a $139 device offering a new way to be shielded from unwanted calls. PrivateTime lets owners pick a four-digit code for sharing with family and friends. All incoming calls are then routed to the answering machine, but those who enter the code make the phone ring -- so anyone who doesn't have the code, from telemarketers to the owner's boss, won't ever be able to interrupt.

Automobiles

Our cars are increasingly a home away from home, and we'll soon have more opportunity than ever to take along every kind of electronic appliance.

Several companies were showing car systems with dashboard display screens for everything from satellite navigation to electronic mail.

One of the most ambitious concepts came from Panasonic Consumer Electronics Co. of Secaucus, N.J.: a $3,200 system, due in May, for showing DVD movies with full surround-sound. The CX-DV1500 fits into a dashboard like a standard CD player, but also plays DVDs. A seven-inch-diagonal LCD display screen for mounting in the back seat area -- TV screens are thankfully illegal in the front seat of cars in the United States -- provide passengers with the picture, while a Dolby Digital processor pipes skin-tingling bass notes throughout the vehicle.

Home Security

The Internet is already an established way for people to stay in touch with each other across time and distance. But now the Net is about to become a watchdog.

Several home security companies are touting inexpensive video cameras that plug into a personal computer and send images to absent homeowners via electronic mail or posting to World Wide Web pages.

One example is MicroSentinel from Security Data Networks Inc. of Cary, N.C., due in March for $699. The package include a base station that plugs into a Windows PC and a security camera, about the size of a paperback book, with a wireless connection to the base station. Extra cameras are $250 each.

For $19.95 a month, MicroSentinel buyers can have images automatically transmitted from the cameras through the base station into a PC and posted onto a World Wide Web site maintained by Security Data Networks. Subscribers can then log onto the Web site from anywhere, at any time, and check the most recent 1,000 images taken by their home security cameras.

The MicroSentinel system even has a built-in motion detector. If movement is detected above a threshold level set by the user, the system can do one of two things: send a pager message to the user, or send out an e-mail message with the camera's most recent picture as an attached file.

Personal health care

Digital technology is also making it less expensive and easier to keep track of your health.

Omron Healthcare Inc. of Vernon Hills, Ill., recently shipped its Body

Logic Pro, a $149 device that gives an instant reading of body fat. Users enter their height, weight, age and gender into a keypad on the face of the Body Logic Pro, then grip two metal-covered handles. The device sends an undetectable electric current through the body and calculates what percentage is fat -- adult men are generally regarded as healthy at 12 to 20 percent bodyfat, while healthy adult women range from 18 to 25 percent.

According to an Omron spokesman, body fat is a more important health statistic than total weight. A successful diet and exercise program, for example, might actually cause a slight increase in total weight as fat is replaced by muscle.

For keeping track of cardiovascular status, Mark of Fitness Inc. in Shrewsbury, N.J., has just started selling its $129 model MF-72 wristwatch-style blood pressure and pulse monitor. A fabric cuff slips over the hand onto the lower arm, holding a small box with display screen. The only controls are a start and stop button for taking readings; there's also an electronic memory that holds up to seven readings for two people.
Clocks and watches

Even humble timepieces were getting a new look at CES.

Casio Computer Co. of Tokyo showed what it called the world's first wristwatch with a built-in receiver for the Global Positioning System (GPS). The five-ounce watch should start selling in Japan within a few months for about $600, and is due in the United States by year-end. A display screen on the watch, just under a square inch, shows longitude and latitude numbers accurate within 100 feet, based on data received from orbiting GPS satellites. The watch can also function as a kind of high-tech compass; at the beginning of a wilderness hike, for example, wearers can mark their position in the watch's memory, and the watch will subsequently tell them which direction to take to get back to that point.

Chaney Instrument Co. of Lake Geneva, Wisc., was displaying its line of Acu-Rite wall clocks that use a small radio receiver to get the precise time -- within a fraction of a second -- from a signal transmitted nationwide by the federal government from Ft. Collins, Colo. The clocks, introduced late last year, and priced around $69, spin their hands quickly forward when first activated to get to the right time, and run for as long as two years on a single AA battery. By summer, the company is promising a line of watches for about $100 that also get the precise time by radio.

CAPTION:
Photos (5)

PHOTO This was the year of expensive high-definition televisions at the Consumer Electronics Show. This is a 64-inch rear-projection model from Philips Electronics.
(990110 CO 1F)
PHOTO Manuela Simonelli of Paris examines a digital video camera. She was among the tens of thousands attending the electronics extravaganza.
(990110 CO 4F)
PHOTO Uniden's phone equipped with Long Distance Manager selects the cheapest carrier on each long-distance call made.
(990110 CO 5F)
PHOTO Casio plans to release a watch that receives signals from the Global Positioning System, displaying precise location within 100 feet.
(990110 CO 5F)
PHOTO Workers set up video monitors at the Sharp exhibit, one of 1,800 exhibits at the Las Vegas show.
(990110 CO 5F)

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VEGAS MARRIAGE: COMPUTERS AND TV CONVERGENCE TAKES STEP AT CONSUMER ELECTRONICS SHOW AS 2 SATELLITE FIRMS ANNOUNCE INTERACTIVE PLANS
San Jose Mercury News (SJ) - Friday, January 8, 1999
By: JON HEALEY, Mercury News Staff Writer
Edition: Morning Final Section: Business Page: 1C
Word Count: 943

MEMO:
     CORRECTION: SETTING THE RECORD STRAIGHT (publ. 1/9/99, pg. 2A) An article on Page 1C of Friday's Business section misidentified a San Jose company making chips for interactive television. The correct name is TeleCruz Technology.

TEXT:
LAS VEGAS - This year, television, computers and the Internet may finally merge at a home near you.

     The result -- which companies plan to make available across the country as early as this spring -- is something that still looks and functions like TV. But by harnessing the power of computers to their set, consumers will be able to tailor TV more to their own tastes and needs.

At the International Consumer Electronics Show here Thursday, the two largest U.S. providers of satellite TV each announced plans to marry some elements of computers with their television services. Both say they'll put out a new generation of converter boxes in 1999 that will give consumers the ability to interact with programs and record them digitally.

     Among the benefits promised are the ability to pause live broadcasts and resume watching a delayed version, call up plot summaries and other information about programs, order products as they are advertised and summon information from the Internet onto the TV.

     The country's leading TV manufacturer, Thomson Consumer Electronics, also revealed its plan for building interactive TV sets with Microsoft Corp. by the end of 1999. And San Jose start-up TeraCruz reported that three set manufacturers are adding its chips to their products, potentially turning even more sets into interactive TVs.

     Consumers have heard similar promises before, including unfulfilled onesfrom two of the main players at this week's announcements -- Microsoft and DirecTV, the country's leading small dish satellite TV service. There is a key difference this time, however: The intense competition between cable, satellite and TV stations is boosting the companies' willingness to roll out new services. If the satellite companies plunge into these services, the cable companies are almost certain to follow.

     Another important difference from the previous waves of computer-television ''convergence'' promises, analysts say, is in what consumers may be offered.

     Microsoft's original WebTV demonstrated that consumers weren't all that interested in browsing the World Wide Web on their TV, said analyst Josh Bernoff of Forrester Research. What Microsoft and other companies are focusing on now is enhancing the TV viewing experience with additional control and information, not replacing programs with Web sites.

     In particular, Microsoft's WebTV and EchoStar, operator of The Dish Network, plan to offer consumers a $499 package that includes a satellite dish and set-top box combining three separate devices into one: a satellite receiver, a digital recorder and WebTV Plus, which allows you to connect to the Internet through your TV.

     The digital recorder, like the devices developed by start-ups Replay Networks Inc. of Palo Alto and **TiVo** Inc. of Sunnyvale, would let viewers

pause or rewind live programs with the touch of a button on their remote control. In versions available later in 1999, the box will be able to record up to eight hours of programs chosen by the viewer or by an electronic agent that learns the viewer's preferences.

Information storage

The box's massive recording capacity also will be used to store games and other information, such as music or news, pulled from the Internet at ultra-high speed. With an extra $25 fee each month to Microsoft on top of the monthly fee to EchoStar for TV programs, the box also will be able to dial into the Internet to browse the Web or send electronic mail.

One further feature is the ability to display the supplemental information that networks are starting to encode within their programs -- text, graphics and video clips that viewers can use to customize programs.

DirecTV unveiled similar enhancements. It plans to add **TiVo** 's technology to converter boxes made by Philips Electronics, due out late this year. No price has been set for the boxes or the **TiVo** service, which would be on top of the monthly fees for TV programs.
Before that, DirecTV plans to include interactive TV technology in converter boxes due out by July. That technology, made by Wink of Alameda, lets viewers call up supplemental information and order products.

Click here

For example, viewers tuned to The Weather Channel could click on their remote control to display a forecast for their hometown or the city they're about to visit. Or, while watching an advertisement for the NFL, they could order a football jersey with a couple more clicks.

Unlike the full-blown Internet service from WebTV, the more limited Wink functions will be provided at no extra charge, Wink officials said.

The features that consumers are most likely to embrace, Bernoff and Van Baker of Dataquest said, are the ones that hew most closely to today's TV-watching experience. Charlie Ergen, chief executive of EchoStar, agreed, saying that he likes the digital-recording functions of the WebTV-enhanced device more than the Internet-related ones.

''I think the pause feature is a great feature,'' he said. ''That really is what, in my opinion, people really, really want.''
Sold as stand-alones

TiVo and Replay both expect to sell their technology as stand-alone boxes in 1999, in addition to any deals they may strike with satellite or cable companies. In the competition with EchoStar, however, they face one distinct disadvantage: both Microsoft and EchoStar will be subsidizing the new boxes to lower their price.

Ergen said that the price of the box will drop as much as needed to keep it below his competitor's prices. Replay, for example, is selling its boxes for $700 to $1,500, depending on the number of hours of storage.

MANAGEMENT CHANGES

MEMO:
Silicon Valley People

TEXT:
Get Manufacturing Inc. of Mountain View named Roger M. Mitricorporate vice president and general manager of its Mexican subsidiary, GETM Mexico. The company also named James E. Patty corporate vice president of quality.

General Magic Inc. of Sunnyvale named Robert J. Sandor vice president, network operations and customer support. Sandor joins the company from InterNex Information Systems Inc., where he served as vice president of operations.

Robert A. Bothman Inc. of San Jose named Brian L. Bothman, 38, director of project management; Gary E. Cook, 51, director of business development; and Dennis M. Reid, 49, director of construction management.

NetObjects Inc. of Redwood City named Scott Shwarts senior director of developer programs and evangelism.

Arts Council Silicon Valley, a non-profit San Jose organization, named seven new board members: Richard Braugh, Papken Der Torossian, Maria Ferrer, Wendy Griffing Novickis, Joyce Iwasaki, Chike Nwoffiah and Judith Schwartz.

Heidi Roizen joined the board of directors of Software Development of San Jose.

Spyrus, a San Jose data security company, named Paul Gordon vice president of sales.

The Association for Computing Machinery in New York named John White, manager of the Xerox Palo Alto Research Center's Computer Science Laboratory, chief executive and executive director.

Release Corp. of Menlo Park named Carolyn A. Rogers chief executive.
Brentwood Venture Capital of Menlo Park named James Mongiello a partner.

RightWorks Corp. of San Jose named Cindy Reese vice president of industry enterprise initiatives. The company also named Louis Selincourt vice president of operations.

TiVo Inc. of Sunnyvale named Stacy Jolna vice president of programming and network relations. The company also named Jonathan Marx vice president of service operations.

Synopsys Inc. of Mountain View named Rick Neely vice president and operations controller.

Broadbase Information Systems Inc. of Menlo Park named Terry LeClair vice president of engineering.

Marimba Inc. of Mountain View named Jacqueline Ross vice president of marketing.

Verilink Corp. of San Jose promoted Tom Flak to vice president from director of marketing.
FreeGate Corp. of Sunnyvale named Richard De Soto vice president of marketing.

Image Network of San Jose named Chris Bruno vice president of sales.

In2Change Inc. of Mountain View named Frank Abajian vice president of sales.

Silicon Valley Bank of Santa Clara named Senior Vice President Valerie

Hart leader of its communications and online services practice.

6/9/4
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  SMART   TV **RECORDERS GET ANOTHER PLAYER**
San Jose Mercury News (SJ) - Friday, September 11, 1998
By: JON HEALEY, Mercury News Staff Writer
Edition: Morning Final Section: Business Page: 1C
Word Count: 684

TEXT:
A second Silicon Valley company is speeding to market with a new, intelligent breed of TV recorder, one that searches for programs that match the viewer's tastes.

   Officials at Replay Networks Inc. of Palo Alto say they will begin selling a high-end version of their recorder in November. Early next year, they planto release a less expensive version that will compete head-to-head with a similar TV service from Sunnyvale-based **TiVo** Inc., which doesn't expect its service to reach the general public until next year.

The two companies have different business models, but their technology is remarkably similar. Both hope to change the way people experience TV by making it much easier to record programs, allowing viewers to adjust the networks' schedules to fit their own.

   This concept is known in the TV industry as ''time shifting,'' and it was one of the factors behind the invention of the VCR. Although most households now have a VCR, few people actually use them to record programs -- in part because people have trouble programming them, in part because people like to watch popular shows at the same time their friends and co-workers do.

   The **ReplayTV** box, like the **TiVo** Center, uses computer technology to make programming simple, even automatic. The two devices enable people to record programs by selecting them via remote control from an on-screen program guide, rather than having to set times and dates.

Theme-based packages

They also allow viewers to record every episode of a particular show, any show featuring a particular actor, or all shows falling into a specified category, such as westerns. Both companies plan to offer theme-based recording packages, too, such as movies recommended by well-known critics.

   The devices store programs on a high-capacity computer disk that can play back as it records. This feature enables viewers to pause, rewind and play back live TV programs as if they were on tape.

   The main difference between the two companies' approaches is that Replay wants to sell the public just an appliance, while **TiVo** wants to sell the box and a $10 monthly programming service.

   The initial, full-featured Replay units are expected to sell for $2,000 to $3,000, chief executive Anthony Wood said, with the later models selling for around $500. The company may offer an optional, program-suggesting service for a monthly fee.

   TiVo 's service, on the other hand, will suggest programs each day to individual viewers based on what they've indicated in the past that they liked or disliked. With the viewers' consent, **TiVo** also will enable

advertisers to tailor their pitches to specific homes. The revenues from monthly fees will help **TiVo** keep the price of their equipment around $300, which is in the range of a VCR.

Both companies are negotiating with consumer-electronics companies to make and sell their boxes to the masses. Replay also has worked closely with home-theater dealers to develop its product, while **TiVo** has concentrated more on programming and service partnerships with broadcast networks, satellite operators, cable companies and advertisers.

''We think we're more customer-focused,'' Replay's Wood said. **TiVo** Vice President of Marketing Edward MacBeth counters, ''We believe the service that we offer is the key to what makes this work.''

Two analysts familiar with both companies said that they did not care for **TiVo** 's monthly fees, but they had some concerns about Replay's strategy, too.

Pricing concerns

''Like the concept; can't tolerate the price -- even for rich home-theater buffs,'' analyst Gary Arlen said of Replay. He added that Replay will be ''very vulnerable to others who could put cheap storage on set-top with a brand name,'' such as Microsoft's WebTV.

Seamus McAteer, an analyst with Jupiter Communications, said Replay's recorder may appeal only to a ''very select segment'' of the market unless the company expands the capabilities of its box.
''It could probably have a sizable market at a price of around $500, $600 if it integrated a DVD player and it didn't wed me to another bloody bill, thank you very much,'' he said.

6/9/5

09737009
THE VALLEY'S MENTOR 'VIRTUAL CEO' IS AN ADVISER TO START-UPS
San Jose Mercury News (SJ) - Tuesday, August 25, 1998
By: MIRANDA EWELL, Mercury News Staff Writer
Edition: Morning Final Section: Front Page: 1A
Word Count: 1,865

TEXT:
In the spring of 1997, a Cupertino software start-up named Magnifi was running out of cash. The firm's founders were spending most of their time looking for funding.

Randy Komisar, a Silicon Valley veteran advising the firm, put a stop to that.

He directed them instead to focus solely on getting out their product before a crucial investors' meeting 45 days away. They did -- and picked up $3 million from investors at the scheduled meeting. At the time, the company had a bare $5,000 left in its bank account.

For Komisar, such forceful intervention is rare but sometimes necessary. He acts as ''virtual CEO'' -- a title that appears on his business cards -- for Magnifi and a handful of other Silicon Valley start-ups.

The unorthodox role he is pioneering, which earned him a write-up as a Harvard Business School case study this spring, fills a critical need in the valley's fast-moving entrepreneurial culture, say those familiar with his work. Described variously as mentor, guide, chief strategist and even

spiritual adviser, Komisar helps nascent companies negotiate the perilous stages of incubation from which few emerge successfully.

''A start-up is a pretty special coming together of people,'' says Komisar, 44, a veteran of such companies as Apple Computer Inc. and Lucas Arts Entertainment Co. ''Part of it is helping them to be decisive and giving them the confidence to do that. Another slice of it is holding them together. It's pretty explosive how these pieces come together, like waves off the rock every day, off each other, off the market.''

Not quite co-captain of the team, yet more than a coach on the sidelines, Komisar has fashioned a role for himself that some say could only exist in the fluid, break-the-rules environment of Silicon Valley. With his shaved head and motorcycle gear, this Zen practitioner looks as iconoclastic as his title. Where more traditional investors might raise their eyebrows at his image or question a structure with ambiguous lines of authority, valley venture capitalists, business leaders and entrepreneurs who have worked with Komisar see only the value of adding an experienced insider who grasps the oftenintangible challenges of founding a technology start-up.

Better than money

''It's a great part of what a start-up has to have,'' says Michael Ramsay, chief executive of **TiVo** Inc., a Sunnyvale start-up. Ramsay, formerly senior vice president at Silicon Graphics Inc., had no need for a mentor, but he brought Komisar to **TiVo** as an adviser. ''What Randy does is every bit as relevant as what the VCs do, in fact maybe more so, especially these days when money is not all that hard to get.''

The Harvard study on Komisar is part of the required curriculum for first-year students on general management, headed in the last three years by former South Bay congressman Ed Zschau, now a Harvard professor of management. ''It provides a different kind of paradigm for management,'' says Zschau.

The Komisar case study is one of roughly two dozen focused on Silicon Valley that the business school has developed in the last year as it makes entrepreneurship a core part of its curriculum, Zschau says.

Komisar first took on the role of virtual chief executive at WebTV, which offers Internet access through television sets. He gave the fledgling company credibility at a crucial stage, says Steve Perlman, president of WebTV Networks Inc. Perlman founded the company in 1995 and sold it 20 months later for $425 million to Microsoft Corp.

''The biggest issue you run into as a start-up is not creating the product but getting people to believe in you,'' Perlman says. ''If he hadn't helped out I don't know if I could have done it. There were times when he was here every day and we were really digging through things.''

Perlman came up with the moniker ''virtual CEO,'' after unsuccessfully pursuing Komisar for chief executive but still wanting to bring him into WebTV in a major role. Komisar ended up advising Perlman on investors, helping pick a management team, consulting on strategy and providing a steadying influence as the start-up rocketed from an unknown to an industry leader in a short time.

A burning issue
Recruiting top-notch executives in technology has always been difficult, but finding management experienced in start-ups has become a burning issue for Silicon Valley.

''I think Randy is filling a real need,'' says Donna Dubinsky, the former head of Palm Computing Inc. ''In the past, everyone was looking for technical talent. Now there's a shift. There are a million products and ideas out there but no one to make a business out of them.''

Dubinsky, who is working on a new start-up herself, says she is swamped with calls from recruiters and investors looking for executives with her start-up background.

Venture capitalists often act as mentors to start-ups, but companies seeking a ''virtual CEO'' are looking for more active help. Komisar says: ''They're looking for someone devoted to the team and not just to the investors.''

Jeff Brody, general partner at Brentwood Venture Capital who has worked with Komisar at a number of companies, agrees.

''The more traditional model is the gray-haired guy who meets on a regular basis,'' Brody says. But Komisar's role is more global, he says. Komisar also is unusual because executives with his background and skills typically run their own companies, Brody says.

Komisar has done that, too, but enjoys the way the virtual CEO position allows him to get Zen distance from what he calls the ''toxic qualities'' of the valley -- its greed and obsessiveness -- while staying engaged in the start-up scene he loves.

Early in his own career, Komisar was known for his ferocious competitiveness and excelled at putting together winning business deals. A lawyer by training, he worked as an attorney at Apple during the 1980s, but left with Bill Campbell to co-found Claris, Apple's software arm.

''The human side just blossomed in that time,'' says Campbell, now chief executive of Intuit. ''In the old days he was the hard-ass attorney. But as he broadened his responsibilities he became the soul of the company.''

He ''fought like crazy'' with Campbell, Komisar says, but what he learned from his mentor was ultimately transforming.

''There was this wonderful sense of the game, of winning the game, but it was a game,'' Komisar says. ''It became a lot more real for me after working with Bill. (I understood that) business is about people.''

Komisar moved on to other ventures, including a stint as chief executive of LucasArts Entertainment. But soon after that, as head of video-game maker Crystal Dynamics, Komisar stumbled, in what he regards as his first significant failure.

The company foundered as the games business grew sour. Komisar was unable either to bring together warring factions within the company or to persuade the board to jettison its publishing side, he says.

Learning his limitations

''I learned my own limitations,'' says Komisar, who had come off his LucasArts tenure with high expectations. He faults himself for failing to be more decisive. One year later, he resigned: ''It was very tough because I'm not a quitter and it felt like quitting.''

Shortly afterward, Komisar took up Zen meditation and began focusing on his gigs as virtual CEO. He says his failure at Crystal Dynamics has not made him shy away from committing fully to just one company. He may yet take on a chief executive post, if the right opportunity comes along, he says.

Besides Magnifi, Komisar acts as virtual CEO for Digital IQ, a Saratoga start-up, and Mondo Media, a San Francisco firm. He has advisory roles at a number of other start-ups, including **TiVo** and NextCard.

Komisar thinks of himself as someone who is involved in decision-making in a broad management role rather than as an outside consultant who is paid

by the hour. He takes no fee, but gets an equity stake in the company. Since his contract generally runs for one year, that is typically a quarter of what CEO equity would be vested over four years.

During that short, initial phase of a start-up's life, Komisar concentrates on developing its executives, its funding and its strategy.

''The kind of companies we've created here couldn't have been created without his kind of role,'' says Perlman, who believes that helping techies make the transition to business leaders will be imperative for the new Internet-based economy.

But Komisar himself is not wedded to a formula that turns techies into CEOs.

At Magnifi, after observing the company and its executives informally for several months, Komisar made it a condition of joining that the then-techie chief executive, co-founder Eric Hoffert, switch out with Ranjan Sinha, a co-founder with a marketing background. Hoffert became chairman and chief technology officer.

The move potentially could have led to ''chaos, disruption, maybe even the collapse of the company,'' Sinha says. Instead, ''we realized how much more effective we were in our new roles and that fostered even more trust in each other and in Randy,'' he says.

At Mondo Media, a 10-year-old San Francisco firm that provides game animation, company founders felt stymied.

''We were pretty tired and not seeing clearly,'' says Chief Executive John Evershed. ''We knew we had this enormous potential. He came in and helped us think it through.''

Helping it refocus
In less than a year, Komisar helped refocus the business on animation for the Internet and television and brought in a new president to head operations. Two months ago, Mondo Media received $2 million in funding -- its first ever -- on the strength of its new business plan.

Similarly, at Digital IQ, within six months, Komisar helped the tiny company of 17 win $2.5 million from investors and persuaded founders to find a new chief executive.

Equally important have been more intangible changes in attitude, says co-founder Tony Hoeber. A countercultural baby boomer with a long distrust of business and its competitive style, Hoeber says his willingness to win hassharpened under Komisar's tutelage.

''I've always been a guy on the fringes and I see Randy (as) someone who is making it on his own terms,'' says Hoeber.

It remains an open question whether Komisar is the precursor of a new Silicon Valley management model or whether, for the time being, he simply has carved out a niche that suits his talents.

Sinha of Magnifi believes one of Komisar's unique strengths, perhaps drawn in part from his Zen practice, is his ability to stand above the fray.

''Really, that is the challenge of the job,'' Sinha says. ''Randy has that skill -- to be detached at the end of the day.''

For Komisar, perfecting the role of virtual CEO has been an opportunity to pare leadership to its essence.

''Strip away as much as possible,'' he says. ''Tie your hands behind your back, put a blindfold on and sit you in a corner. What's left of

leadership?''

CAPTION:
Photo

   PHOTO Randy Komisar
         Silicon Valley veteran helps get firms focused
(980825 FR 1A 1)

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START-UP AIMS FOR TV ON DEMAND
San Jose Mercury News (SJ) - Friday, August 21, 1998
By: JON HEALEY, Mercury News Staff Writer
Edition: Morning Final Section: Business Page: 1C
Word Count: 1,093

TEXT:
Start with the premise that watching TV is a good thing.

   Add the supposition that there are many entertaining, worthwhile
programs on TV, even though they never seem to be on when you're watching.

Finally, throw in the reality that most consumers would rather stare at a
flashing ''12:00'' than learn how to program their VCRs.

   These are the core tenets of **TiVo** Inc., a Sunnyvale start-up that
hopes to transform the TV viewing experience. **TiVo** has developed what
amounts to an intuitive VCR that scans the channels for programs its owner
might like, then records them in an easy-to-use format.
   The purpose is what the TV industry calls ''time-shifting,'' or enabling
viewers to move their favorite programs to more convenient time slots. It's
a step toward a long-awaited evolution of TV entertainment, video on demand
-- a service that would let viewers watch whatever program they wished
whenever they wished.

   Several other companies have tried in vain to sell services or products
that offered more control over the television lineup, analysts observe. For
 TiVo to succeed, they added, it may have to enlist some powerful partners
among the TV manufacturers, broadcasters, cable companies and advertisers.

   That's a tall order, particularly without proof that the public will
want **TiVo** 's service. The last major effort at time shifting was a
pay-per-view network called Your Choice TV, which folded earlier this month
despite the backing of cable giant Tele-Communications Inc.

   In fact, while close to 90 percent of Americans have a VCR, analyst
Larry Gerbrandt at Paul Kagan Associates said that fewer than 10 percent
regularly record programs. Even though VCRs aren't as hard to program as
they used to be, people still like to watch shows when everyone else is
watching them, said Bruce Leichtman, director of media and entertainment
strategies for the Yankee Group.
   ''They are used to being dictated to,'' Leichtman said.

   On the other hand, viewers need more help than ever before sifting
through the TV lineup, given the proliferation of networks. Just as
companies such as Yahoo and Excite attract users by bringing order to the
chaos of the Internet, so can **TiVo** succeed by helping people navigate the
TV dial, said board member Geoff Yang, a partner at Institutional Venture
Partners, a venture capital firm.

Officials at **TiVo** -- veterans of the computer, microprocessor, Internet and cable TV industries -- say they plan to try out the service with several hundred Bay Area consumers this fall. The company expects to launch the product formally in 1999, with tentative prices of $10 a month for the service and something over $300 for the equipment.

The monthly fee is for providing daily suggestions about shows, special packages oriented around themes, and other services aimed at narrowing the 8,000 hours of TV down to the few hours per day that match the user's tastes. The monthly bill could be a tough sell, analyst Gary Arlen said, adding, ''That's their biggest challenge.''

At first, the equipment will take the form of a VCR-sized box that users plug in between their TV and their antenna, cable box or satellite dish. The company's hope, however, is that the equipment will someday be built into television sets.

The company's ambition to change the way people watch TV is founded on two key technologies.

One is the ability to record TV signals on the kind of high-capacity disk found in computer hard drives, and to play back programs even while they are being recorded. In addition to giving viewers instant access to anything they record -- no need to search through hours of tape -- it lets people pause and rewind live programming. No more waits for instant replays, no more crucialscenes missed while answering the doorbell.

The other is the ability to record programs based on a viewer's identity or preferences. In essence, the **TiVo** equipment reads the TV lineup electronically and looks for shows matching the ones viewers say they like -- and rejecting ones they don't like, or have already seen.

Naturally, the more users reveal about their likes and dislikes, the better **TiVo** performs. The **TiVo** remote control enables viewers to tell the equipment what they love, what they like and what they hate.

The result, said CEO Michael Ramsay, is that viewers can come home, turn on the TV and call up the programs they want to watch, not necessarily the ones dished out by the networks. For example, ''Must See TV'' on Thursday nights could be transformed into three hours of Gilligan's Island reruns -- shows that TBS broadcasts at 5 a.m.

The **TiVo** technology also can grab advertisements and insert them into shows. That way, a young family watching ''Murder, She Wrote'' could see a Pampers spot that the **TiVo** equipment inserted in place of a Depends ad, based on what the family had told **TiVo** in the past.

Advertisers long have targeted their pitches to specific audiences, but the best they can do today is align themselves with TV programs geared toward certain age groups and tastes. **TiVo** could not only let advertisers target individual consumers, but also tell advertisers what those consumers liked and disliked, said Robert Poniatowski, **TiVo** 's director of product marketing.

Ramsay said it would be up to viewers to decide how much to divulge to advertisers, although viewers could be given incentives to reveal information about themselves. Added Ed MacBeth, **TiVo** 's vice president of marketing and business development, ''We take the privacy issue very, very seriously, as do the advertising partners we're working with.''

The company also is talking to broadcasters about ways to develop special packages for **TiVo** users. One of the networks that has expressed an interest in the company is HBO, a premium cable service that survives on subscription fees, not advertising dollars.

Kevin Dowdell, vice president of interactive ventures for HBO, said the company would love to make all of its shows available on demand on its subscribers, and **TiVo** is a step in that direction. ''I think of it as a

pretty big step beyond a VCR,'' Dowdell said.

''And it' s not easy,'' he added. ''We live in a world of standardized electronics and big players that have a lot of control. They have to convince many of the key players in the industry to use it . . . and come up with a business model that works all the way around.''

CAPTION:
Photo

PHOTO The **TiVo** equipment reads a TV lineup electronically and looks for shows matching the ones viewers say they like.
(980821 BU 1C 1)

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08778111
INTEL TOUTS 'SOCIAL COMPUTING' BUT SOME DOUBT THAT PARENTS AND CHILDREN WILL JOIN IN USING A MACHINE DESIGNED FOR SOLO USE, EVEN IF IT'S INTEGRATED WITH A TELEVISION
San Jose Mercury News (SJ) - Friday, October 4, 1996
By: JODI MARDESICH, Mercury News Staff Writer
Edition: Morning Final Section: Front Page: 1A
Word Count: 1,384

MEMO:
THE FAMILY ROOM PC

TEXT:
Could the personal computer become the gathering spot for family activities?

Intel Corp. is working on a new project to lead families in the late 1990s to gather around a large color monitor attached to a PC - just like the family of the 1930s huddled around the radio, or its counterpart in the 1950s gathered around the TV set.
Intel has dubbed the concept ''social computing.''

Not content for PCs to be relegated to the home office, Intel and Toshiba America Information Systems Inc. quietly have begun evangelizing the ''Family Room PC'' to PC manufacturers, with an eye toward wide availability of the new systems in fall 1997.

The Family Room PC, which will come in many shapes and sizes from various vendors, is not a new idea. PC-TVs have begun appearing on the market, but this represents a new effort by Intel, whose position as the world's largest maker of microprocessors tends to heavily influence the design decisions of PC makers, to join the PC-TV bandwagon.

Under the plan, the PC-TV will use a large-screen color monitor and a TV tuner that transforms the PC into a **smart** **TV** . Home users will be able to plug in their surround-sound speakers and play movies off their digital video discs, for example. Some Family Room PCs will offer a message center for telephone and electronic mail, while others will offer video conferencing.

Family Room PCs will have wireless devices, like keyboards and joysticks that will let groups of people watch television, play games, surf the Internet or control home electronics devices.

Skeptics see joystick fights

The idea of the PC as the family's central socializing area has attracted skeptics already.

''One of my points of skepticism about the PC-TV is it's a group device,'' said Steven Tirone, research analyst with International Data Corp. ''Can you imagine mom and pop and junior fighting for control of the joystick?''

Today's PC, for home and business use, was crafted for a single user who sits about two feet from the monitor and mostly uses the tool for personal productivity. The new Family Room PCs are big enough that families can sit 10 to 12 feet away.

The Family Room PC doesn't introduce new technology. Rather, it integrates a number of emerging technologies onto the PC's main circuit board, or motherboard. Intel representatives have briefed several PC manufacturers on what technologies will be built into the Family Room PC. They include:
(box) Circuitry to support the new digital video discs, or DVDs, that are set to replace CD-ROMs in most computers.

(box) The latest graphics technology, known as MPEG-II, to allow vivid video playback.

(box) Surround-sound capabilities so that people watching movies or television can get a home theater effect.

(box) A dual function use that will allow people to surf the Web, and while waiting for Web pages to come up, to watch TV. The Family Room PC also will be a platform for single-user or multiplayer games.

''(The PC) should have better graphics and better Web browsing than a single-function appliance,'' said Mike Aymar, vice president and general manager of Intel's desktop products group. ''It's a more complete, more flexible device.''

Aiming for 'early adopters'

PC-TVs will start off as relatively expensive products that appeal to ''early adopters'' who want to be the first to have the newest electronic gadgets. But as prices decrease, as most computers and consumer electronics product do, more and more people may tune in to PC-TV.

''You'll find a range of products for the Family Room that initially might be a little more expensive than today's mix of PCs, but quickly they will reach all the same price points that home/office PCs hit today,'' Aymar said.

There are drawbacks to the PC-TV besides its price, however. It's built around the Windows 95 operating system by Microsoft Corp., for one thing. Television watchers who are used to instantly switching on their TV might tire of waiting for Windows to come on, or ''boot up.'' And if the operating system crashes during a cliffhanger episode of the ''X-Files,'' viewers might not be too pleased.

PC makers briefed by Intel said the devices could range in price from $3,500 to $5,000.

But already, prices for the first PC-TVs to hit the market are coming down.

Gateway2000, a Sioux City, S.D., PC manufacturer that mostly sells its products through mail order, is a pioneer in this nascent market. Its first so-called ''Destination'' PC-TV began selling in May. This week the company broke the $3,000 price barrier by cutting almost $700.

Analysts said sales for the early PC-TVs, including the Destination, are

disappointing.

''One of the reasons Gateway resorted to placing (Destination) in selected outlets is it's not moving very well,'' said Walter Miao, senior vice president of Access Media International, in New York City. ''It seems difficult to sell a $4,000 system sight unseen.''

Stacy Hand, product marketing manager for the Gateway Destination, said sales have ''met expectations,'' but she acknowledged that consumers are resistant to change. ''When you're developing a new product category, you can't base its acceptance on the first six months of sales.''

'Very promising concept'

Intel's Aymar is one of the first users of the Destination. Aymar recently helped his daughter write a report on the governor of Tennessee. By surfing the Web, they clipped a photo of his family and included that in the report.

''To do that (with a home office PC), it was difficult,'' Aymar said. ''We had to keep rolling back and forth on chairs in front of our two-foot PCs. The Gateway Destination is a very promising concept. You get rid of the wires, it goes to a large screen. It's a more social experience. Think of the potential for applications.''

Aymar envisions families flipping through a digital photo album, or keeping track of all their CDs - and playing them - through an application hooked up to a CD jukebox.

Gateway's Hand added: ''There's no question the PC will be the centerpiece of the home entertainment system. Everything else, the appliances like VCRs, the gaming machines, are going to be in the beginning attached to it. But as the product evolves, those things will go away.''

Such logic is why a host of technology companies are offering new products aimed at home entertainment using either the PC, TV - or both. NetTV Inc., a small San Rafael company, makes a PC-TV that competes with Gateway's Destination, and other manufacturers including Compaq and Toshiba are expected to follow suit.
Lower-cost competition

Intel is promoting the Family Room PC while its turf gets encroached upon by consumer electronics vendors who are offering lower-cost, simpler-to-use ''information appliances.'' These aren't as powerful as an Intel-based PC but might appeal to consumers with less disposable income.

For instance, WebTV Networks Inc. has created a $300 device that hooks up to a TV monitor and lets users surf the web through a remote control device. The resolution of TV monitors is not as precise as a computer monitor, but WebTV's offering is a viable alternative.

''Intel sees this shift in the industry, bringing the power of a computer to average people, but not in the form of a PC, and they're trying to get out there and pre-empt that, and say, 'No, no, no, the PC is the perfect fit,' '' said Joe Gillach, vice president of marketing at Diba Inc., a Menlo Park developer of software for information appliances. ''They're trying to protect their franchise.''

Information appliances are typically devices designed for one or two specific uses, such as making phone calls and retrieving electronic mail, or surfing the Internet from a TV.
''We believe that what's happening is there is this big battle brewing in the industry, a sort of clash of the titans,'' Gillach said. ''It's the PC manufacturers . . . versus the consumer electronics companies.''

Microsoft has teamed up with PC manufacturers to make PCs more like appliances. One initiative, called ''On Now,'' aims to make PCs instantly

available when they're turned on rather than waiting a minute or longer for
Windows to boot up.
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DESCRIPTORS: COMPUTER TECHNOLOGY FAMILY FUTURE CULTURE

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SIT DOWN! ' SMART ' TV **ANTENNAS WILL ADJUST THEMSELVES**
San Jose Mercury News (SJ) - Tuesday, April 18, 1995
By: JEANNINE AVERSA, Associated Press
Edition: Morning Final Section: Business Page: 1F
Word Count: 395

MEMO:
Tuesday Focus: New Ideas

TEXT:
For the millions of Americans who still rely on set-top antennas to watch
television, it's an all too familiar experience: You adjust the antenna to
get a clear picture, and by the time you plop back down on the couch the
screen is fuzzy again.

   Help is on the way.

   Under a contract with the National Association of Broadcasters, Megawave
Corp., a Boylston, Mass., company that has done work for the military, is
developing a "smart antenna."
The antenna, the first of its kind, has two important features, a
built-in microprocessor and the ability to pick up a wide range of
frequencies from the VHF band to the UHF, said John Abel, the association's
executive vice president.

   "It's been almost 20 years since the last major change in antenna
technology," Abel said.

   Megawave plans to have a prototype to show the association by June. The
antenna should be in stores by January, said James Tomlin, staff engineer
for Megawave, which has been working on the antenna since last year.

   Tomlin says the antenna could sell for $15 to $100.

   The association, whose members include broadcast networks and their
affiliates, would not say how much it is investing in the project.

   Among the benefits of the new antenna to viewers:

   (box) They won't have to get up and adjust the antenna if they click to
another channel.
   (box) It is less susceptible to interference from surrounding objects,
such as a person's body.

   (box) It is expected to improve reception.

   "If I switch from channel 33 to 7, the antenna automatically adjusts, but
you won't see it physically move," Abel said. That's what they mean by a
smart antenna, and that's made possible by the microprocessor inside.

   One of the big annoyances to a person adjusting an antenna is that when
he or she moves away from the set, the picture goes haywire again. That

happens because "the body affects the electromagnetic field" around the antenna, said Richard Green, president of Cablelabs, a private research and development facility backed by major cable companies.

Green said he is skeptical that the new antenna could address this problem. He was also skeptical that an antenna containing a computer chip and the technology to sweep from the lower VHF to the higher UHF frequencies -- a large slice of the airwaves -- could be made cheaply.

DESCRIPTORS: TELEVISION; EQUIPMENT; BUSINESS; COMPANY; CONTRACT

6/9/9

08063036
SHORTAGE BOOSTS PRICES OF CHIPS POWERING MULTIMEDIA PROGRAMS
San Jose Mercury News (SJ) - Friday, March 3, 1995
By: Mercury News Staff and Wire Report
Edition: Morning Final Section: Business Page: 3C
Word Count: 321

TEXT:
A severe shortage of the computer memory chips that power multimedia and interactive applications is causing prices to skyrocket.

The rising prices won't affect personal computer prices in the immediate future because most major PC makers have long-term contracts. Even if the contract prices were to rise, PC makers may be reluctant to raise retail prices because of an intense price war and competition to garner market share.

The shortage has pushed the price of standard 4-megabyte dynamic random-access memory, or DRAM, chips as much as 60 percent on the spot market, analysts said.
"Most companies are sold out," said analyst Gerry Moore of Cowen & Co. "You name the company, they are all adding capacity."

Most new computers now come with 4 megabytes of memory, but popular games, entertainment programs and the scheduled release of Microsoft Corp.'s Windows 95 in August will require the average machine to have from 8 megabytes to 12 megabytes of memory.

The shortage is being caused by growing demand and a reduced supply line caused in part by the earthquake in Kobe, Japan, that caused some memory chip plants to shut down. Also, chip makers currently reap higher profit margins from less-powerful 4-megabyte chips because those are the standards in demand by computer manufacturers. Memory chips store programs and data temporarily while the personal computer is turned on.

Steven Appleton, chairman of Micron Technology Inc. in Boise, Idaho, for example, said his company won't stop making 4-megabyte memory chips in favor of the larger capacity 16-megabyte chips.

"If someone wants us to make something else, they better have a good reason," Appleton said. Computer companies, which buy the bulk of chips used in computers, still aren't requiring the higher memory chips.
The push for more capacity comes amid soaring demand for multimedia computers, video- **on** - **demand** **TV** set-top boxes and video games that gobble up computer memory.

DESCRIPTORS: SEMICONDUCTOR; PRODUCT; MULTIPLE; MEDIA; PROGRAM; COST; INCREASE

6/9/10

PAC BELL UNVEILS PLAN FOR 2000 'SUPERHIGHWAY' TO CARRY TV AND MORE
San Jose Mercury News (SJ) - Friday, November 12, 1993
By: MIKE LANGBERG, Mercury News Staff Writer
Edition: Morning Final Section: Front Page: 1A
Word Count: 925

MEMO:
See also related story on page 21A of this section.

TEXT:
Cancel any future plans to surf through 500 channels of cable television.

   Pacific Bell has something even more compelling to offer: one channel.

   That's the ultimate goal behind the company's ambitious announcement Thursday of plans to spend $16 billion by the year 2000 on a "communications superhighway" serving the Bay Area and much of Southern California.

   Pac Bell's network ultimately could offer all kinds of entertainment, information and education whenever the customer wants -- creating a single channel, in effect, instead of requiring viewers to wade through multiple channels in search of a particular program.

   Copper wires that now carry telephone calls from homes and offices to regional switching centers would be replaced with a combination of fiber-optic lines and coaxial cable.

   The huge increase in capacity would allow Pacific Bell to deliver television programming and computer data as well as phone calls, putting the San Francisco-based utility in direct competition with cable television operators.

   Construction will start in the spring of next year in four urban areas: northern Santa Clara County (covering the cities of Campbell, Los Altos, Los Altos Hills, Milpitas, Mountain View, San Jose, Santa Clara, Saratoga and Sunnyvale), and portions of Los Angeles, San Diego and Orange County.

   The goal, according to Pac Bell, is to have several hundred thousand customers hooked up by the end of 1994, 1.5 million by the end of 1996 and 5 million by the end of the decade. The company said the expansion will be self-financed through money saved by operating a more efficient state-of-the-art network.

   "There will be no rate increases," Pacific Bell President Phil Quigley said Thursday at a Los Angeles news conference. "We will internally fund this great new opportunity."

   $5 billion deal with AT&T

   Most of the equipment and software will come from AT&T, which builds telephone equipment and computers in addition to providing long-distance service, through a $5 billion partnership with Pacific Bell.

   Pac Bell isn't spending $16 billion just to offer better service. The company is trying to fight off a direct threat to its future.

   The state's largest cable television operators have been making plans to upgrade their systems to essentially take on Pac Bell -- opening the prospect of cable companies offering telephone service along with ESPN, MTV

and CNN.

Tele-Communications Inc. of Denver, the largest cable operator in both the nation and California, said in October it would merge with Bell Atlantic Corp., a regional phone company based in Philadelphia, to hasten a nationwide upgrade of TCI's cable systems.

TCI plans to spend $2 billion during the next three years on fiber-optic lines, including a fiber loop circling San Francisco Bay that is already under construction with a scheduled completion date in 1995.

Regulatory freedom sought

Cable operators are now pushing for regulatory freedom to compete with Pacific Bell in providing telephone service; Pac Bell and other regional phone companies are simultaneously pushing for the right to offer television programming.

Dale R. Bennett, state manager for TCI Cablevision of California in Walnut Creek, welcomed Pacific Bell's move to match the cable industry.

"We're actually pleased that it's beginning to happen," Bennett declared. "We always think competition is better than control."

All the promises of wonderful new services from Pac Bell and TCI could be premature, however.
Much of the equipment required to build the communications superhighway is still under development and, despite the billions at stake, the developers don't yet know what services will appeal to consumers.

No one wants to be left out

Large phone companies, cable operators and television producers have staged a series of can-you-top-this news conferences all year, eager to appear to be on the cutting edge of technology. The frenzy has reached the point where no one wants to be left behind -- and Pac Bell has come under criticism recently for appearing to sit on the sidelines.

"I feel they've been forced to show they're doing something," said Michael Killen, a telecommunications industry analyst in Palo Alto. It could take several years to sort out what the public wants, according to Killen, and how fast companies such as Pac Bell can afford to move.

"The returns won't be immediate and huge, because they (Pacific Bell) will be in a price battle with cable operators and video stores," added Tom Adams, a cable television analyst with the research firm Advanstar Associates in Carmel Valley.
Concluded Eric C. Zimits, a telecommunications industry analyst with the investment firm Volpe Welty & Co. in San Francisco: "Everyone understands this is a huge opportunity, but it's like a mountain in the distance -- no one is sure how far away it is."

CAPTION:
Map

MAP: CLEVELAND LEE -- MERCURY NEWS

What Pacific Bell wants to offer

In these Silicon Valley cities, Pacific Bell hopes to offer a variety of new services. Among them:

Video **on** **demand** -- **TV** viewers could select from thousands of movies and television programs stored on computer disks, summoning any one of them at any time.

Telecommunting -- Workers at home could plug into computer networks as

if the were in the office.

Electronic distribution -- Video games, music and magazines could be sent through the network.

Home shopping -- Viewers could select merchandise they want on a shopping channel and place an order with the push of a button.

Education and community involvement -- Students could attend classes at a local community college through their television; voters could participate in city council meetings.

(Map of Santa Clara County) (color)

DESCRIPTORS: TELEPHONE; COMPANY; FUTURE; MULTIPLE; TELECOMMUNICATION; PROGRAM

NEW LAW FORCES BROADCAST, CABLE INTO EACH OTHER'S ARMS
San Jose Mercury News (SJ) - Tuesday, August 31, 1993
By: RON MILLER, Mercury News Television Editor
Edition: Morning Final   Section: Living   Page: 1D
Word Count: 1,383

TEXT:
AT FIRST, passage of the Cable Act of 1992 by Congress threatened to touch off a final conflict of Armageddon-like proportions between those old enemies, broadcast and cable television.

Now it's beginning to look as if the negotiations forced upon the old adversaries over a key issue -- payment for cable's use of local TV station signals -- will hasten a process of fundamental change in the way broadcasters and cable systems do business.

It might, in fact, affect the face of television well into the next century, when broadcasters and cable operators may need each other's help to survive.

A significant turning point in broadcast/cable relations probably came last week when CBS conceded it is now discussing a "new programming venture" for cable with the largest cable system operators in the country. CBS hasn't been a player in cable since it folded CBS Cable, its unsuccessful cultural network, more than a decade ago.

That means the last holdout among the big four networks is almost certain to launch a new cable service within the next year. It also seems likely to erase the last possibility of a nationwide "blackout" of any broadcast network programs by cable systems that otherwise might have occurred after Oct. 6.

Not long before the CBS announcement, relations between broadcast and cable interests had reached the "hour before midnight," as the Oct. 6 deadline fast approached for implementing a provision in the new cable law that says cable systems no longer may pick up the broadcast signals of local TV stations without their permission, then retransmit them to homes for a fee as part of the basic channel "menu."

The Cable Act also made it possible for local TV stations that were shut out of local cable to demand a channel allocation under the "must carry" provisions of the new law. Stations that already were on cable also could make sure they'd remain there by requesting "must carry" status.

But, even more important, stations the cable systems wanted to carry now could demand some form of payment in return for permission to send their signal into homes via cable.

Under the new law, no cable system could carry any of the "payment **on demand** " **TV** stations without agreeing to terms. Another way of looking at it was that a cable company could drop any station that wouldn't agree to terms.

A nationwide standoff developed when seven of the 10 largest cable companies -- the so-called "MSOs" or "multiple system operators" -- flatly refused to consider any negotiations that involved cash payments. Sen. Daniel Inouye, D-Hawaii, one of the architects of the cable law, promised a government probe of the unified cable stand for possible anti-trust violations.

At its worst, when most TV stations were demanding cash payment, the standoff could have led cable systems to drop some of the most popular network affiliates, and independent stations with the most-watched syndicated shows, just as the fall TV season was getting started and the World Series was only days away.

Nothing like that is going to happen now. That's because both sides feared the economic consequences of reaching the deadline without coming to terms.

Needing each other

Broadcasters feared loss of advertising revenue if too many cable systems dropped them. More than 60 percent of U.S. homes now rely on cable instead of rooftop antennas to receive TV signals. Many viewers no longer even own working antennas. Any significant drop in audience would force broadcasters to make good on viewership guarantees they had made to advertisers in advance.

But local cable concerns also worried about widespread complaints from viewers if their favorite channels were dropped overnight. They weren't anxious to provoke any subscriber revolts by playing their trump card in negotiations.

Rather than stubbornly race toward Armageddon, broadcasters and cable operators blinked. They began to look for ways to save face while complying with the law and came up with a series of bold compromises.

So far, the result of those compromises has been the promise of adventurous new partnerships between local TV stations and cable systems, broadcast networks and cable ownership groups.

Already, three of the four broadcast networks have made deals with the largest cable system owners in the United States waiving "retransmission" fees in return for guaranteed cable channels they can use to launch new cable networks. This will further blur the dividing lines between what's cable and what's broadcast.

ABC and ESPN2

ABC's deal, which covers only the seven TV stations it owns, will help launch ESPN2 this fall, a spinoff of ABC's existing all-sports network, on some of the nation's largest urban cable systems. San Francisco's KGO (Ch. 7) is owned by ABC, so its pending deals with local cable will bring ESPN2 to the Bay Area later this year.

The Fox network has made a similar deal to launch a new ad-supported basic cable entertainment network in early 1994. By promising to share revenues from that network with its affiliated stations, Fox has persuaded most of its stations to waive fees and join with the network to lock in cable channels for Fox's cable network all across the country.

Oakland's KTVU (Ch. 2) is one of them, which means a second all-new cable network will be available to most Bay Area subscribers as a result of the negotiations.

NBC is negotiating deals for the stations it owns by offering to give up fees in return for cable channels. It plans to launch a new all-talk cable network called "America's Talking." It's offering NBC affiliates the chance to join the party by providing them with space for local advertising "inserts" in the new network programming. NBC hopes that'll give them an incentive to waive local cable fees and trade the use of their local signal to cable companies in return for an empty channel NBC's new network might use.

That seems to be the route CBS is taking: Launch a new cable service that will offer some potential of financial participation to its affiliates, who still may need such a bargaining chip in their own separate local negotiations.

The ties that bind

The net result will be four all-new cable networks and deeper, more intricate relationships between the broadcast networks, their stations and the nation's local cable systems.

Even more intriguing are the cooperative ideas springing from enterprising local TV stations and the cable systems that carry them. For example, NBC's local affiliate, San Francisco's KRON (Ch. 4), last week announced a series of cable deals to trade its broadcast signal for cable channels it will use to launch its own 24-hour all-local news channel.

In the Bay Area, KRON has been the most innovative and aggressive in the pursuit of cable deals, a purposeful strategy to position itself to compete in a future where networks like NBC are expected to gradually lose audience as more and more viewing alternatives turn up.

As heated as some of the exchanges between the rivals became when the Cable Act of 1992 was being pushed into the law books, it has forced them further into cooperation than they ever might have imagined. It's almost analogous to the current world economic climate, in which once deadly adversaries such as Japan and the United States are so involved in cross-ownerships, partnerships and interdependencies that conflict no longer seems very practical.

ABC and NBC already are heavily invested in cable. Fox not only is starting its first cable network, but is using cable channels on friendly systems to fill in gaps in its national affiliate ranks. The new fifth network proposed last week by Warner Brothers also will use cable systems as network affiliates where TV stations aren't available.

Co-dependent new world

Day after day, a growing number of local TV stations do news updates on cable networks like Ted Turner's CNN Headline News or have similar cooperative arrangements with local cable for news. Co-ventures for sports rights packages already exist. It's clearly a trend that someday may remove the walls between cable systems and TV stations entirely.

When that day comes, the players may look back on their squabbles over the Cable Act of 1992 as a quaint reminder of the start of something very special to them all.

DESCRIPTORS: TELEVISION; SERVICE; LEGISLATION; REACTION

06336183
THE BIG PICTURE LINKING TV, COMPUTER CREATES HOME THEATER
San Jose Mercury News (SJ) - Sunday, December 1, 1991
By: MIKE LANGBERG, Mercury News Staff Writer
Edition: Morning Final   Section: Computing   Page: 1F
Word Count: 1,122

MEMO:
See also related story on P. 1F of this section

TEXT:
Frox Inc. of Sunnyvale is a small start-up company attempting to single-handedly transform home entertainment technology, something that large American electronics companies have not yet had the nerve to try.

"The first vision of the inevitable," Frox proclaimed earlier this year in magazine ads for a product that won't even start shipping until later this month.

Inevitable" refers to the electronics industry's big goal for the '90s: merging TV and computer.
"First vision" is the Frox System, a home-entertainment package that puts awesome powers in the hands of consumers who can afford $10,000 for a starter set and up to $50,000 for the deluxe model.

At the heart of the Frox System is a 32-bit Sparc microprocessor, the same chip that powers work stations made by Sun Microsystems. But the casual couch potato won't need to learn anything about computers to play with Frox; the system is a Trojan horse that almost invisibly introduces a computer into the living room.

With the Frox System, everything is controlled through the TV screen with a one-button remote control called the Frox Wand. The wand sends a disembodied, white-gloved hand across on-screen displays that resemble the control panels of a TV, videocassette recorder or stereo.

"The key to the Information Age is going to be ease of use," said Austin Vanchieri, Frox's president and chief executive officer.

"Fortunes will be made on that in the next 10 years," added Steve Reynolds of Link Resources, a market research firm in New York. "People are calling out for better ways to control and digest the information streams they have in their lives."
The Frox System will control and digest information without a second thought by the consumer.

A service called Frox Cast pipes TV schedules into the system's 52-megabyte hard drive, using a previously empty portion of the signal from superstation WTBS in Atlanta. Viewers can display TV schedule grids on screen, call up details on any single program and order their VCR to tape a selection at the push of a button.

Early next year, Frox Cast will be expanded to include sports scores and stock quotes, entering a market eyed by telephone companies and newspaper publishers.

By converting incoming analog video and audio signals into digital code, the Frox system also enhances the quality of TV and music. Frox claims its enhanced video image virtually matches high-definition television, or HDTV, a proposed new standard that is at least five years from reaching homes in the United States. Music can be altered to imitate the acoustics of anything from an intimate jazz club to a huge arena.

What's more, the Frox System is easily updated to accommodate new types of home entertainment equipment or new information services. The computer

can be reprogrammed automatically through information sent over WTBS or by inserting a special tape into the system's VCR.

Non-technical Frox users probably won't realize they're harnessing a computer to enjoy all these new features. Nor is Frox eager to rub it in -- the Sparc processor is contained inside an unadorned black box.

"This is a unique American interpretation of how electronics should be made easier," said Bud Myers, vice president for sales at Frox.

With its five-digit price, Frox is aimed at the emerging market for home theater systems. Home theaters, which typically combine a large-screen television and a high-end stereo, start at $5,000 and range up to $100,000 depending on the degree of sophistication.

Frox is starting with home theater because the market is growing rapidly -- unlike demand for moderately priced televisions and stereos -- and because buyers can support the hefty cost of new technology. But the company is already at work on "Project Mercury," a scaled-down Frox system intended to reach stores by Christmas 1993 at a cost of about $1,000.

The company is also willing to license its technology -- a combination of custom-designed semiconductors along with an operating system containing more than 250,000 lines of computer code.

"We're looking for a partner now to (help us) approach the mass market," says Austin Vanchieri, Frox's president and chief executive officer.

Approaching the mass market won't be easy. Frox's elegant, easy-to-use software and powerful hardware has won laudatory coverage recently in Business Week, Forbes and The Wall Street Journal.

But it's unclear how soon major manufacturers of consumer electronics, most of them in Japan, are going to start connecting computers to televisions and whether they will develop their own operating systems rather than turn to Frox.

"Frox's competition is less other independent companies than development groups inside the big electronic companies," says Richard A. Shaffer, editor of the Technologic Partners Computer Letter in New York.

Several Japanese consumer electronics companies are already offering high-end audio and video equipment that matches Frox performance, although without Frox software to tie it all together.
Competitors in the United States, meanwhile, are working on similar approaches to " **smart TV** ." Insight Telecast Inc. of Palo Alto, for example, is planning a system to provide on-screen TV schedules and VCR programming at a mass-market price. Michael Faber, Insight's president, said the system will be available in some cities before the end of next year.

In its favor, Frox has a solid Silicon Valley pedigree. The company was formed in 1988 by industrial designer Hartmut Esslinger of Frogdesign Inc. in Menlo Park and programmer Andy Hertzfeld, two key creators of the original Apple Macintosh.

Brought together informally by Apple co-founder Steve Jobs, Esslinger and Hertzfeld then recruited Andreas Bechtolsheim, the technical genius behind Sun Microsystems.

The original team dropped out of active participation early last year, however, in part because of the Frox System's spiraling cost.

"One of the reasons I left the project is because it was clear to me it wasn't going to be inexpensive enough to reach the market I want it to reach," said Herzfeld, who is still a Frox stockholder. He also said Frox engineers left out some of the best elements in his software design.

Before Esslinger stepped back, he raised $22 million from investors in Europe to support Frox. Vanchieri said last week the company expects to sell more than 3,500 systems in 1992, enough to generate almost $40 million in revenues and put Frox at the break-even point sometime in the second half of the year.

To get there, Frox will need another $5 million. Vanchieri said he expects to raise that amount or more from private investors later this month.

CAPTION:
Photo

PHOTO: Gary Parker -- Mercury News

Austin Vanchieri, chief executive, says ease of use is key to Frox System (color)

DESCRIPTORS: COMPUTER; TECHNOLOGY; TELEVISION; MERGER; THEATER;
               ENTERTAINMENT

6/9/13

06309100
THE FUTURE HINGES ON HOW WE DECIDE TO GET THERE
San Jose Mercury News (SJ) - Monday, November 4, 1991
By: MIKE LANGBERG, Mercury News Staff Writer
Edition: Morning Final Section: Business Monday Page: 1D
Word Count: 1,260

MEMO:
See also related articles on this page.

TEXT:
When it's time to debate eye-glazingly esoteric technical and regulatory issues surrounding the future of telecommunications, Pacific Bell knows exactly what to do.

Grab the heartstrings and yank hard.

Pacific Telesis, Pac Bell's San Francisco-based parent company, recently produced an eight-minute video called "First Born" to accompany a lobbying effort aimed at politicians and regulators.
Set in the year 2003, "First Born" is the story of a middle-aged Hispanic couple in Fresno whose daughter in San Diego is about to give birth prematurely to their first grandchild. As the wife frantically packs her bag, the husband sits at his small two-way videophone making plane reservations and choosing a crib from a catalog display. Meanwhile, a doctor studies a sonogram of the daughter's baby from home by videophone and gives his diagnosis to the nurse.

At the tear-jerking conclusion, the wife -- now in San Diego -- introduces the family's new grandson to her husband in Fresno through a window-sized two-way video screen.

Pac Bell is willing to offer us this wonderful future -- but there is a catch. The phone company wants to be freed from a long list of regulatory restraints so it can build the expensive infrastructure required to support advanced telecommunications services.

Fiber optics is the key to this vision -- specifically, putting high-capacity fiber-optic cables at or near individual homes. Manufacturers

of telephone equipment, telephone companies and regulators are now in the middle of deciding how to engineer this transformation and how much it will cost.

These tough issues aren't getting much public attention, but they are crucial to the future of Silicon Valley. Dozens of companies in the hardware, software and information services industries are preparing to make multimillion-dollar gambles on the future of telecommunications in the home. Products or services that require the larger capacity of fiber could flop if that capacity is not there soon enough.

A bundle of fiber cables no thicker than an adult's finger can carry 96,000 telephone conversations simultaneously -- a feat that would require 27 conventional copper-wire telephone cables, each measuring two to three inches in diameter. The huge capacity of fiber optics could make possible new interactive services such as video conferencing and sophisticated home shopping.

The biggest hurdle remaining is what telephone companies call the "last mile" or the "local loop," the huge network of copper wires that connects individual homes and small businesses to central switching offices.

There is a consensus that copper wire will eventually disappear from the last mile, but little agreement on when or at what cost.

Fiber, which carries brief bursts of laser light, has already taken over the top of the telephone pyramid. Because fiber is most efficient at carrying heavy volumes of data or voice traffic, long-distance networks began converting to fiber optics a decade ago, and they are now almost totally converted. Fiber optics has also become cheaper than copper wire for connections between local telephone switching centers and for big companies that need to move large amounts of computer data.

But fiber is still more expensive than copper for the local loop, because the relatively low volume of traffic doesn't cover the high cost of stringing fiber cable through neighborhoods and installing equipment at individual homes or curbside units, serving several homes, that convert light into electronic signals.

More efficient designs could wipe out that cost difference within a few years. But copper wire wears out slowly. If fiber is put into the loop only when copper needs to be replaced, the conversion process could take 30 or 40 years.

That leaves telephone companies with a "chicken and egg" dilemma. The types of advanced services portrayed in "First Born" would generate extra revenue to cover the cost of installing fiber. But there isn't any demand yet because there isn't any way to provide these services today at a reasonable price.

"To be honest with you, I think if one looks at this very realistically, there is no mass market 'want' out there," said Dale Harris, a former Pacific Bell executive who now directs the Center for Telecommunications at Stanford University. "There is a wish list, but when you talk about (customers) paying more, it's a different question."

Telephone companies face several other roadblocks.

A maze of federal laws and state regulations prevents phone companies that provide local service -- Pacific Bell and GTE in Northern California -- from branching into other types of telecommunications such as cable television, "electronic Yellow Pages" home shopping, two-way video and home information services.

Numerous opponents, led by newspaper publishers and cable television operators, oppose relaxing those barriers because they fear the possibility of a monopoly supported by the phone companies' vastly greater financial resources. In California, the state Public Utilities Commission is

concerned enough about the risks to ban Pac Bell and GTE -- at least for
now -- from putting fiber in the local loop.

"If they make a huge investment and it doesn't pay off, it could affect
rate-payers because rates would have to go up to cover the cost," said
David Gamson, a senior analyst at the PUC's San Francisco office.

The Federal Communications Commission took the first step toward allowing
telephone companies into the video business with a surprise ruling on Oct.
24 that could ultimately allow Pacific Bell and other local phone companies
to provide "video dial tone" service.

Video dial tone would be similar to telephone dial tone -- the customer
would decide whom to call. A **smart** **TV** , connected to video dial tone,
would scan available programming from many different sources and offer a
selection to the viewer.

Rapid changes in telecommunications technology are also confusing the
picture. New ways to compress electronic signals and increase the capacity
of copper wire are raising the possibility that many advanced services
could be offered without replacing copper in the local loop.

Cable companies, too, are considering whether to put fiber in their loop
-- a network almost as comprehensive as the local telephone system. About
90 percent of households in the United States are already passed by a cable
network and about 60 percent of those households subscribe.

This network is built on coaxial cable, which has a much higher capacity
than copper wire. Cable television today is dedicated to a single purpose:
providing television signals. But cable operators are studying
enhancements, including increased use of fiber optics, to support new
services that could put them in direct competition with telephone
companies.

John J. Sie, head of the Encore movie channel in Denver, said cable
systems will build fiber "nodes" within five years that will serve from 100
to 1,000 homes with up to 400 television channels and offer interactive
services.

Sie claims the cable industry can make this switch for $100 per
household, compared with estimates of $1,200 per household for curbside
fiber telephone service. Telephone companies won't be able to make money
with fiber in the loop, according to Sie, unless they enter the video
market -- unfairly competing with cable companies, which don't have the
cushion of regulated rates to guarantee a profit.

"We don't see any economic justification for retrofit" of the local
telephone loop with fiber, Sie said. "So we want to see a business plan
(from the telephone companies) that shows how they will get a return"
without unreasonable rate increases.

CAPTION:
Photo

PHOTO: GTE Corp.

SHOWING IT OFF -- A GTE employee demonstrates a two-way videophone. GTE
is testing fiber-in-the-loop phone service in Cerritos, in Orange County.

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DESCRIPTORS: TELECOMMUNICATION; FUTURE; TELEPHONE; COMPANY; ADVERTISING

06287031
BRAVE NEW TOYS IS ART HEAD WIZARDS MAP THE FUTURE OF FUN
San Jose Mercury News (SJ) - Sunday, October 13, 1991
By: MIKE LANGBERG, Mercury News Staff Writer
Edition: Morning Final Section: Business Page: 1E
Word Count: 1,724

TEXT:
Los Angeles - FAST FORWARD to 1999.

You've just returned from the local electronics store with a "magic box,"
a home entertainment system as different from today's smart remote controls
as a supercomputer is from a pocket calculator.

After wiring the $500 gadget to your television, stereo speakers, cable TV
and telephone, you are connected to a host of services that make you the
master of your own information age.

The box will select your TV viewing, scanning 1,000 channels delivered by
fiber optics for the type of programs you like; put you into "virtual
reality" video games; offer movies on demand with CD-quality sound; display
merchandise and take your order at the touch of a button; transfer money
from your checking account to pay monthly bills; activate and display the
image from a video camera at your front door whenever someone rings the
bell; and connect you to data bases around the world to help with the kids'
homework or a business project.

This gadget -- you might call it the Holy Grail of Silicon -- is only a
vision today. Nonetheless, it is inspiring computer companies such as IBM,
Apple Computer Inc. and Intel Corp. that want to supplement shrinking
demand in the business world with multimedia entertainment hardware.

The vision is also inspiring thousands of entrepreneurs, engineers and
marketers in a race to find a competitive edge in what one executive
predicted will blossom into a new $14 billion industry in 21st-century home
electronics. About 250 of the most dedicated crusaders gathered last week
for "InterTainment '91," a three-day conference on the future of an
emerging field known as interactive entertainment.

Like true believers in any cause, the conference crusaders spent hours
rhapsodizing about the promised land. But they also argued and sniped at
each other about how to get there.
Interactive entertainment is a big business, with about $2 billion spent
last year, mostly on arcade, computer and home video games.

Trip Hawkins, chairman and founder of Electronic Arts in San Mateo, which
designs computer games, proclaimed in his keynote speech that the market
has a potential to reach $14 billion annually -- based on the assumption
that spending on home electronics eventually will parallel spending for
renting movies on videocassette.

"We have an opportunity to change the way people live," Hawkins said.

But consumers aren't always eager to embrace someone else's idea of how
they should spend their time, and there are several barriers the
interactive entertainment industry must overcome before it will achieve
Hawkins' prediction. Among them:

(check) Lack of a proven market. Nintendo demonstrated that pre-teen boys
will do almost anything to play action-adventure video games, including
bugging their parents to the point where one in every three homes in the
United States now has a Nintendo game deck.

But no one has yet devised a computer game or similar form of interactive
electronic entertainment that appeals to a broad range of adult consumers.

"The people we are trying to attract have never played a video game

before and probably don't want to," said Rob Fulop of Interactive Productions in Foster City, which is about to introduce computer-based games aimed at adults.

(check) Lack of standards. According to Hawkins of Electronic Arts, 15 companies are offering or are about to offer interactive systems based on compact laser discs, called CD-ROM. Consumers will be baffled by the huge selection, Hawkins said, and will be reluctant to buy anything out of fear they will purchase equipment that will soon be obsolete.

(check) Lack of technology. Despite the strides in building smaller, cheaper and faster computers as well as greatly increasing storage capacity of CD-ROM, the magic box is still out of reach.

For example, microprocessors aren't yet powerful enough to generate live-action video images that would lure adults. Teen-agers are drawn to computer games with stick-figure animation, but many computer game developers don't expect to reach the mass market without lifelike characters.
Yet not all the talk at InterTainment '91 was musing about this difficult, far-off future. Bits and pieces of the magic box are reaching the market. Four product categories stood out at last week's meeting:

INTERACTIVE CD

After almost a decade of hype and unmet promises, consumers will get a chance this Christmas to buy a new form of entertainment called interactive CD.

Interactive CD players, which look something like videocassette recorders and hook to a television set, run on CD-ROM, short for compact disc-read-only memory. CD-ROM discs look like audio CDs but instead store a combination of computer programs, data, visual images and sound. Using a hand-held remote control, for example, viewers can call up any encyclopedia entry instantaneously, search for entries under any keyword or switch between text and illustrations.

Commodore International Ltd. of West Chester, Pa., introduced the first CD-ROM player in May, called CDTV. Philips, the European electronics conglomerate, will introduce its system, called CD-I, at a news conference in New York on Wednesday.
The attraction of CDTV and CD-I is the immense storage capacity of a CD-ROM, equal to about 500 floppy disks. An entire 26-volume encyclopedia with text, illustration and even a few snippets of speeches and music fits on a single CD-ROM.

But almost no one outside of Commodore or Philips expects the new products to make much of a dent in the market.

The problem is cost and software. CDTV is selling for $795; Philips appears already to be backing away from a decision this summer to price CD-I at $1,400 and is aiming for about $1,000.

Consumers aren't ready to spend that much money for a new technology they don't fully understand, according to several market researchers who spoke at InterTainment '91. They also question whether an encyclopedia will hold viewers' attention for very long and think both the Commodore and Philips systems lack any drawing power.

"I think these guys have a terrible problem," said Robert Alexander of Alexander & Associates, a New York research firm that organized InterTainment '91. "There's no software out there."
Alexander predicted Commodore and Philips will sell from 30,000 to 40,000 CD-ROM players this year, "a drop in the bucket" compared with established categories of consumer electronics such as VCRs and video-game decks.

Although demand for interactive CD will develop eventually, hardware and software are likely to soon evolve beyond this year's debut products -- making it unlikely the two companies will turn a profit on their investment any time soon, Alexander said.

CD-ROM VIDEO GAMES

Grown-ups may not flock to CDTV and CD-I, but their children are about to get pitched another use of CD-ROM -- as an attachment for popular video-game systems such as Nintendo, Sega and NEC Turbografx.

NEC sells a $299 CD-ROM player that ties into its game system, using the disc's storage capacity to offer more sophisticated graphics that include brief interludes of digitized live video. Sega will introduce a CD-ROM for its Genesis system next month in Japan for the equivalent of $340 and plans to reach the U.S. market next summer.
Nintendo has made vague references to CD-ROM and is expected to enter the market by early 1993.

VIRTUAL REALITY

Robert Greenberg, a manager in Texas Instruments Inc.'s consumer products division, surprised the audience at InterTainment '91 by announcing a home virtual reality system that TI will offer at Christmas '93 for only $299.

Although unwilling to discuss any details, Greenberg said the system would use "revolutionary" display technology to project a high-quality graphic image in a lightweight helmet. The system would be driven by game cartridges costing $50 to $60.

TI plans to sell 3 million of the unnamed product, enough to create a market well in excess of $1 billion for hardware and game cartridges combined.

"Virtual reality is finally starting to leave the hands of philosophers and enter the hands of engineers and marketers," said Christopher Gentile of Abrams/Gentile Entertainment Inc., a toy design firm in New York.
Virtual reality is loosely defined as putting game players into a computer-generated environment, rather than merely reacting to images on a display screen. Full "immersion" virtual reality can include a helmet that senses head movement and changes the view seen through small TV screens mounted in front of each eye, along with gloves that allow adventurers to touch objects in the virtual world.

At the Battletech game center in Chicago, visitors already can enter a world created by computers.

Eight players climb into vehicle simulators and play against each other on a futuristic computer-controlled battlefield. About 150,000 customers have experienced Battletech, at $7 for a 10-minute ride, since the center opened in August 1990. The company behind Battletech, Virtual World Entertainments Inc., will start opening locations nationwide under the Virtual World name, with re-programmable simulators that can be used for a variety of games.

SMART TV

On the average, U.S. households turn on the TV for about seven hours a day. But it's a one-way street: The TV talks, we listen.
That could change in 1992. Several companies at InterTainment '91 described equipment that will allow viewers to get involved with the action on TV.

Interactive Systems Inc. of Beaverton, Ore., is launching its VEIL system that reads specially encoded signals included in a TV broadcast. The VEIL terminal, which costs about $100 with a $10 monthly fee, connects to the TV and telephone, allowing viewers to participate in game shows, enter

contests and order merchandise. The VEIL terminal also has a small printer that can produce coupons at the touch of a remote-control button whenever the viewer sees an ad for an appealing product.

TV Answer Inc. of Reston, Va., is pursuing a similar but more ambitious proposal that wouldn't tie up the family phone. TV Answer's box, expected to cost $200 to $300, would communicate through a radio network similar to a cellular telephone system.

The Federal Communications Commission is now considering whether to award a small slice of the radio spectrum to TV Answer. If the approval process stays on schedule, the company expects to sign up its first customers next summer.
CAPTION:
Photo

PHOTO: NEC TurboChip's 'Dark Wing Duck' offers more sophisticated graphics than earlier video games. (color)

DESCRIPTORS: ELECTRONICS; EQUIPMENT; TECHNOLOGY; COMPUTER; COMPANY; VIDEO; TELEVISION; MUSIC; GAME; ENTERTAINMENT; CONSUMER

6/9/15
DIALOG(R)File 634:San Jose Mercury

06147089
THE COMICS ARE LOSING FANTASY AND GETTING REAL
San Jose Mercury News (SJ) - Sunday May 26, 1991
By: TANYA ISCH CAYLOR, Knight Ridder News Service
Edition: Morning Final Section: Living Page: 1L
Word Count: 810

MEMO:
Cover Story

TEXT:
FORT WAYNE, Ind. - We should have seen it coming.

Ted had been nagging Sal for days to lighten her workload. We knew what he was talking about.

Nonetheless, when we turned to the April 17 comics page and read yuppie superwoman Sally Forth's weary response:

"Are we talking about lovemaking here, Ted?"
We couldn't help feeling a little embarrassed.

Sex? In the funny papers? We were used to seeing grizzled old perverts leer at scantily clad women in "Beetle Bailey." But this was something different.

Never mind that Ted and Sal never got out of the kitchen. We knew things would never be the same.

And they weren't.

Less than a week later, in "For Better or Worse," John drank from a cup of milk that he discovered had been pumped from his nursing wife's breast. And then Luann (a strip based on a neurotic 13-year-old) began to menstruate.

The timing was purely coincidental, say the cartoonists who draw the strips. But all three incidents are examples of a movement toward realism

on the comics pages.

"It's a trend, not only in the subject matter of the strips but in the type of strips that newspapers are buying," says Jay Kennedy, comics editor of King Features, which distributes "Sally Forth" and "Luann."

"You're going to be seeing fewer funny animals, fewer Peter Pan-type strips, less fantasy and more reality. People want to see more characters that they can relate to."

Greg Howard, the Minneapolis-based cartoonist who draws "Sally Forth," says it seemed natural for his characters to bemoan their lack of time together.

"The situation is one that married couples with children face, particularly if they are both working," he said in a recent phone interview. "I guess I did have to think about it a little bit. But I wasn't trying to stir up any trouble."

And he didn't, as far as he knows. He hasn't received any letters on the topic thus far.

The people who produce the nation's comics pages hope this is a sign that the Church Lady-like standards they've been held to for decades are relaxing a bit.
"For years, the comics have been perceived as a medium for children, which they are not, especially in dailies," complains Kennedy. "Only the Sunday comics page truly has many readers who are children."

Garry Trudeau's "Doonesbury," which has dealt with AIDS and other adult themes in recent years, has helped to chip away at that stereotype. So has "The Simpsons," the silly but **smart TV** cartoon that appeals to both adults and children.

But there are some subjects that both adults and children ought to be more open about, says Lynn Johnston, creator of the strip "For Better or Worse."

"The trouble right now is that everybody talks about bodily functions and sex in an ugly, nasty, dirty way," Johnston said in a phone interview from her home in North Bay, northern Ontario.

Unlike strips such as "Dennis the Menace," where the characters never age, Johnston has let her characters simply live their lives in the 12 years she's drawn the strip. So when Ellie gave birth a few weeks back, it seemed natural that she'd breast-feed the new baby.
"It's a very discreet, very warm, very pleasant thing you see happening all the time," she says. "I nursed both my children and I really enjoyed it, but I thought there were some funny aspects of it, too."

The misidentified cup of milk, for example. Or the upcoming strip in which Ellie realizes she's developed lopsided breasts from nursing on one side. And then there's the problem every nursing mother dreads: accidental leakage.

Johnston remembers wearing a red silk dress to a dance, only to have her front soaked after someone mentioned the word "baby." She still hasn't decided whether she'll use a similar scenario in the strip, though. "If it's appropriate. If it works in. If it's funny."

When Greg Evans, creator of "Luann," was considering his menstruation series some months back, he sent copies to Johnston.

He wanted her feedback. And he was wondering whether Johnston would address the issue with Elizabeth, her version of the neurotic 13-year-old.

"I thought he handled it very well," she says. "But as far as Elizabeth,

I don't know. The characters sort of write the strip themselves."

To tell the truth, Johnston is leery of having her two teen-age characters, Elizabeth and Michael, do anything that might embarrass her own teen-age daughter and son.

"My son would be horrified if I showed Michael talking to a girl about sex," she says.

And she has enough trouble talking to her daughter about the facts of life as it is. So Johnston leaves informational books lying around and checks periodically to see if they've been moved.

It's a sad scenario, she admits.

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DESCRIPTORS: HUMOR; ARTS; LIFESTYLE; IMAGE; CHANGE

U.S. TUNES ITSELF OUT OF TECHNOLOGICAL EVOLUTION LOSING MARKETS, IT'S TOUGH TO CATCH UP

MEMO:
Richard J. Elkus Jr. is chairman and CEO of Prometrix Corp. of Santa Clara. He formerly worked with Ampex Corp., developing the VCR. He is chairman of the National Science Foundation panel on high-definition television and is a co-chairman of the American Electronics Association committee on HDTV. He wrote this article for the Mercury News.

TEXT:
DURING the 1940s and 1950s three U.S. companies created industries that became the foundation for many of the strategic world markets of today. RCA was instrumental in the development of television. Shockley Transistor Co. spawned the semiconductor industry. Ampex Corp. developed magnetic recording.

Today, television, telecommunications, computers, consumer electronics and mass media owe much to these three companies.

As of 1970, America was virtually self-sufficient. It encompassed the world's biggest market, produced more products and had the largest trade surplus of any nation. America's currency was among the most solid in the world; America's banks were the biggest.

Today, only one U.S.-owned company (not RCA) produces television sets. The television market is dominated by Japan and Europe. Today the United States is virtually a non-participant in the market for audio and video recording.

Today the United States is no longer the largest producer or clear technological leader in semiconductor design and manufacture. The U.S. surplus balance of trade in computers is less than half of what it was in 1981. And America has a negative balance of trade in computers and related products with Japan.

In a spring 1990 report on 12 emerging technologies, the Department of Commerce's Technology Administration noted that in comparison with Japan, the United States was:
(check) Losing badly in advanced materials, biotechnology, digital

imaging technology and supercomputers.

(check) Losing in advanced semiconductor devices, high-density data storage, high-performance computing, medical devices and diagnostics, optoelectronics and sensor technology.

(check) Holding its own in artificial intelligence and flexible computer-integrated manufacturing.

(check) Gaining in none.

The change in balance of economic power between the United States and Japan over the last 45 years has been staggering. As R. Taggart Murphy wrote in the March/April issue of the Harvard Business Review, "Japan today sits on the largest cache of wealth ever assembled."

(hbox)

Why a change of this magnitude in such a short time?

Imagine that products and markets are like links in a chain. If you take a product and carry its development to a logical extreme, it becomes related to other products. For example, the optical system on a 35mm camera is similar to the optical system on a video recorder.

Conversely, the electronic imaging system that is common to a video recorder is now beginning to be substituted for film in a camera.

Similarly, if you develop a market to its logical extreme, it becomes related to other markets. For example, the development of the market for videcassette recorders made possible the market for prerecorded videotape which is now a larger market than that of film in theaters.

Conversely, if manufacturers of prerecorded videotape choose one VCR format over another for their programming, that choice tends to influence the popularity and growth of the market for VCRs. Thus products and markets become interrelated and interdependent as they are developed.

(hbox)

In the electronics market there is one component common to virtually all electronics products -- the semiconductor. Control enough links in the chain such as the markets for video recording, cameras, audio recorders, television and computer products, and you become predominant in semiconductors. Become predominant in the design and development of semiconductors, and your prowess as a developer of other electronic products and markets increases substantially.

Electronic products are fundamental to virtually every market there is. Thus, a chain of markets linked together begins to control a technological base of such significance that competitive re-entry is very difficult and expensive.

One often hears how we must improve our technological base. Technology follows markets, not the other way around. If you own the technology, but lose the market, you will lose the technology.

Ampex introduced the video tape recorder in 1956 and the VCR in 1970. As a company it had a virtual 100 percent hold on patents in the field. Ampex decided not to pursue the VCR market. That market was picked up by the Japanese. With that market went not only the majority of video recording but also a major segment of the support technologies including the design and manufacture of semiconductors.

The development of high-definition products (for example, HDTV) by the Japanese represents a major improvement in the processing of large amounts of audio-visual information. High-definition products will touch virtually

every aspect of human creativity.

For example, high-definition television doubles the horizontal and vertical resolution of television providing five times the visual information and as a result, spectacular pictures and sound. These advancements are made possible in part by major improvements in computer display and semiconductor technology.

Because of the breadth of applications and cost of development, no industry, technology or company will be able by itself to meet the challenge and opportunities of high-definition products and systems. As the compact disc redefined the music industry, high-definition products will redefine mass media.

With major advances in digital technology, high-definition products will redefine computers and their application. With alternate means of transmission, high-definition products will redefine the broadcast industry, shopping, medical electronics, education and banking.

As Japan introduces a full line of high-definition products, it ensures itself of major advancements in: cameras and recorders, fiber optics and satellite transmission systems, VCRs, computers, flat screen displays and semiconductors --all markets in which it has a major if not commanding position.

The infrastructure in electronic products and systems will ultimately become one with that of the media and telecommunications services as the ability to process massive amounts of audio-visual information increases. This is part of the reason for Sony's purchase of CBS Records and Columbia Pictures.

(hbox)

As the Japanese position in strategic, interrelated end-use markets has improved, the cost of competitive re-entry by others becomes prohibitive. This, in large part, has occurred because of the interrelated nature between products and markets. Today individual products and markets are really a combination of many interrelated technologies, components, products and markets.

For example, the technology of putting pictures on tape was of supreme importance 20 years ago. Now competing in the video recording market requires high levels of sophistication in: digital signal processing; display technology; camera and optical know-how; semiconductor technology; computer technology; high-volume, fully automated manufacturing capability; and mass marketing, sales and distribution.

Other costs also rise. For example, the development of a semiconductor device that cost a few million dollars a few years ago may cost in excess of $1 billion today.

Hence, while the United States may be willing to drop a product or market on the basis of "opportunity cost" and reinvest in a more lucrative enterprise, Japan will often do just the opposite. Because of the concept of relationships between products and markets, the Japanese feel that to abandon a product or market means the potential loss of other related products and markets, and therefore, the loss of valuable infrastructure.

It is this infrastructure -- that is, strategically related end-use products and markets -- that provides the basis for future economic growth and development.

Assuming that the combination of the markets for electronics, telecommunications and media is the basis for entry into the information age and recognizing that high-definition products and systems are fundamental to the confluence of these three market areas, the following conclusion should be considered:

Any significant loss of infrastructure of end-use products and markets in electronics, telecommunications and media may substantially reduce the growth potential of an economy dependent upon that infrastructure.

Can the United States turn the tide in its favor? Absolutely. The U.S. computer industry is still dominant. America's position in mass media, software and transmission services is still solid. These markets can provide a basis for restoring America's competitive position.

But such an effort must also include strategic moves back into consumer electronics, display systems, audio and **video recording** , **computer** peripherals, components, and related technologies. Otherwise, the combination of developments in high-definition products and those markets America has lost will continue to encroach on remaining U.S. positions of strength.

CAPTION:
Drawing
    DRAWING: Charles Waltmire -- Mercury News

    (Drawing of Uncle Sam holding an old television and a man pointing to a bigger, newer and higher definition television)

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DESCRIPTORS: US; JAPAN; TELEVISION; ELECTRONICS; TECHNOLOGY; RESEARCH;
               POLICY; MONEY

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TECHNICAL TIPS DREAM OF FULLY AUTOMATED HOME IS HERE
SAN JOSE MERCURY NEWS (SJ) - Friday, May 15, 1987
By: JONATHAN TAKIFF, Knight-Ridder News Service
Edition: Morning Final Section: Weekend Page: 9D
Word Count: 415

TEXT:
HAVE you ever wished you could call home and ask your VCR to tape a TV show?

    Or maybe you have wished you could command the house air conditioner by remote to go into overdrive 'cause you're bringing home a gang from the office.

This dream of the fully automated home -- including a computer and telephone-controlled audio/video system, microwave oven, burglar alarm, lights, heating system and even a plant-watering apparatus -- already has been realized in Japan by Mitsubishi.

    Now the fantasy will come true in the United States.
    Making it all possible, the Washington, D.C.-based Electronic Industries Association has decided on a U.S. standard for data exchange between appliances -- selecting the GE Homenet Powerline System.

    This is a pragmatic choice, because GE is not just a full-line manufacturer of appliances, but also the leading supplier of ''white goods'' (ovens, refrigerators, washers/ dryers) to the new-home building industry.

    GE's Homenet is a fine-tuning of the BSR-developed lamp-and-appliance control system now marketed also by X-10, Leviton and Radio Shack.

In their current state of evolution, the systems use special receiver modules that plug into wall outlets and in turn control the power to a plugged-in appliance or lamp.

The modules take their instructions from either a stand-alone central base station, a '' **smart** '' **TV** (in one GE case) or a home computer (an option with X-10 gear).

The beauty of the system is that information is sent through the regular house wiring. The Mitsubishi smart home system, by contrast, requires separate wiring.

Now that an easy communications standard has been established, manufacturers will begin building a control receiving circuit (called a ''bus'') into major appliances. This will cut down on component clutter and make it possible for pieces of equipment to ''talk'' to each other.

And it will make it possible for you to ''dial M for movie taping'' or ''dial C for casserole cooking'' -- from anywhere on Earth.

(box)

With the cost of a good-quality personal portable copier now dipping below $500, many people are tempted to buy one for the home office. Now Matsushita has an added incentive: Newly introduced in Japan, its FN-P300 personal copier also can make hard-copy prints of images from TV, VCRs or videodiscs.

A chip inside the printer grabs and stores a single video image on request -- say a cute shot of your kid from a home video, or a mail-order address flashing on the screen in a commercial -- until you want to print it. ---------------------------

DESCRIPTORS: HOUSING; TECHNOLOGY; PRODUCT; QA; VIDEO; AVIATION; SAFETY

6/9/18
DIALOG(R)File 634:San Jose Mercury

03523364
ARNE SULTAN, TV PRODUCER, WRITER
SAN JOSE MERCURY NEWS (SJ) - Thursday, March 20, 1986
By: United Press International
Edition: Stock Final Section: Local Page: 11B
Word Count: 114

TEXT:
Los Angeles - Arne Sultan, the Emmy award-winning executive producer of the popular ''Get **Smart** '' **TV** series, is dead, a spokesman said.

Sultan died Monday of cancer at his Studio City home. He was 60.

Sultan had worked in the entertainment industry as a comedian, writer and producer. His credits and co-credits included ''The Governor and J.J.,'' which he helped create, ''He and She,'' ''Barney Miller,'' ''The Sandy Duncan Show'' and ''The Partners.''

With longtime writing partner Marvin Worth, Sultan wrote such feature films as ''Boys' Night Out,'' ''Three on a Couch'' and ''Promise Her Anything.'' Sultan and Worth grew up together in Brooklyn.
''Get Smart'' won the Emmy as outstanding comedy series for the 1968-69 television season.

DESCRIPTORS: OBITUARY